

**MONITORING AND EVALUATION, CONTEXTUAL AND BEHAVIOURAL
DETERMINANTS AND PERFORMANCE OF MATERNAL HEALTH
PROGRAMMES IN KENYAN COUNTY GOVERNMENTS**

JOHN GATIMU

**A Thesis Submitted in Partial Fulfillment of the Requirement for the Award of
the Degree of Doctor of Philosophy in Project Planning and Management of the
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DECLARATION

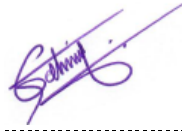
This thesis is my original work and has not been submitted for any degree award in any other university.

Student Name:

John Gatimu

Reg. No L83/97887/2015

Signature:



.....

Date:

19/Aug/2022

This thesis has been submitted for examination with our approval as University supervisors.

Signature:



Date: 19/Aug/2022

Prof. Christopher Gakuu.

Department of Management Science and Project Planning

University of Nairobi

Signature:



Date: 19/Aug/2022

Dr. Anne Ndiritu

Senior Lecturer

Department of Educational & Distance Studies

University of Nairobi

DEDICATION

This thesis is dedicated to my wife Margaret, my son Max and my daughter Sky.

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TABLE OF CONTENTS

	Page
DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	xiii
LIST OF FIGURES	xvii
LIST OF ABBREVIATION AND ACRONYMS	xviii
ABSTRACT	xx
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 Monitoring and Evaluation	3
1.1.2 Contextual Determinants Performance of Maternal Health Programmes	6
1.1.3 Behavioral Determinants	7
1.1.4 Programmes Performance	8
1.1.5 Devolved Maternal Health Programmes in Kenya	8
1.2 Statement of the Problem	10
1.3 Purpose of the Study.....	12
1.4 Objectives of the Study	12
1.5 Research Hypotheses	13
1.6 Significance of the Study	14
1.7 Assumptions of the Study.....	15
1.8 Delimitation of the Study	15
1.9 Definition of Significant Terms Used in the Study	16
1.10 Organization of the Study.....	18
CHAPTER TWO	19
LITERATURE REVIEW	19
2.1 Introduction.....	19
2.2 Theoretical Framework.....	19
2.2.1 Program Theory	19
2.2.2 Contingency Theory	21

2.2.3 Stewardship Theory	21
2.2.4 The Principal Agent Theory	23
2.2.5 Theory of Constraints (TOC)	26
2.3 Performance of Maternal Health Programmes	26
2.4 Monitoring and evaluation and Performance of MHP	28
2.5 Planning for M&E and Performance of MHP	31
2.6 Stakeholders Engagement in M&E and Performance of Maternal Health Programmes	36
2.7 Capacity Building for M&E and Performance of Health Programmes.....	42
2.8 Data Management for M&E and Performance of Health Programmes	49
2.9 Moderating Influence of Contextual Determinants and Performance of Health Programmes	56
2.10 Moderating Influence of Behavioural Determinants and Performance of Health Programmes	59
2.11 Conceptual Framework.....	63
2.12 Summary of the Literature.....	66
2.13 Knowledge Gap	67
CHAPTER THREE	81
RESEARCH METHODOLOGY	81
3.1 Introduction.....	81
3.2 Research Paradigm.....	81
3.2.1 Research Design	82
3.3 Target Population.....	82
3.4 Sample Size and Sampling Procedure.....	83
3.4.1 Sample Size	83
3.4.2 Sampling Procedure.....	84
3.5 Research Instruments	84
3.5.1 Self-Administered Questionnaire	85
3.5.2 Interview Guides.....	85
3.5.3 Observation Guide.....	85
3.5.4 Pilot Testing of Instruments	85
3.5.5 Validity of Research Instruments	86
3.5.6 Reliability of Research Instruments	86
3.6 Data Collection Procedures	88

3.7 Data Analysis Techniques	88
3.7.1 Descriptive Analysis	89
3.7.2 Correlation Model and Regression models.....	90
3.7.3 Summary Statistical Tests of Hypotheses	95
3.8 Ethical Consideration.....	97
3.9 Operationalization of the Variables.....	99
CHAPTER FOUR.....	102
DATA ANALYSIS, FINDINGS AND DISCUSSIONS.....	102
4.1 Introduction.....	102
4.2 Return Rate	102
4.3 Background Information of Respondents.....	103
4.3.1 Distribution of Respondent by Gender.....	103
4.3.2 Distribution of Respondent by Age Bracket	103
4.3.3 Distribution of Respondent by Religious Affiliation.....	104
4.3.4 Distribution of Respondent by Highest Level of Academic Qualifications	
105	
4.3.5 Distribution of Respondent by Number of Years in the Maternal Health	
Programmes.....	105
4.3.6 Distribution of Respondent by Profession.....	106
4.3.7 Distribution of Respondent by Sections they cover.....	107
4.4 Basic Tests for Statistical Assumptions.....	108
4.4.1 Normality Test.....	108
4.4.2 Heteroscedasticity.....	108
4.4.3 Autocorrelation Test.....	109
4.4.4 Test for Multicollinearity.....	110
4.4.5 Sampling Adequacy.....	110
4.4.6 Control of Type I Error and Type II Error	111
4.4.7 Analysis of Likert Type Data.....	112
4.5 Performance of Maternal Health Programmes	112
4.5.1 Quality of Care and Service Delivery	112
4.5.2 Achievement of Maternal Health Indicators	115
4.5.3 Achievement of Child Health Indicators	116
4.5.4 Level of Patient and Employee Satisfaction.....	118
4.5.5 Operational Efficiency.....	120

4.5.6 Overall Descriptive Analysis of Performance of Maternal Health Programmes.....	121
4.6 Planning for M&E and Performance of Maternal Health Programmes	124
4.6.1 Budgeting, Resource Mobilization & Allocation and Performance of County MHP.....	124
4.6.2 M&E Frameworks and Performance of Maternal Health Programmes ...	126
4.6.3 M&E Work Plans and Performance of County MHP.....	128
4.6.4 M&E Policy and Performance of Maternal Health Programmes	130
4.6.5 Strategic Planning in Support of M&E and Performance of Maternal Health Programmes	132
4.6.6 Overall Descriptive Analysis of Planning for M&E.....	134
4.6.7 Correlation between Planning for M&E and Performance of Maternal Health Programmes	136
4.6.8 Regression Analysis of Influence of Planning for M&E on Performance of County MHP	137
4.6.9 Findings from Qualitative Information	139
4.7 Stakeholder Engagement for M&E and Performance of County MHP.....	141
4.7.1 Advocacy to Promote M&E and Performance of County MHP	141
4.7.2 Stakeholder Identification & Analysis and Performance of County MHP	143
4.7.3 Stakeholder Communication and Performance of County MHP.....	145
4.7.4 Collaborations and Performance of Maternal Health Programmes	148
4.7.5 Community Participation and Performance of County MHP	150
4.7.6 Overall Descriptive Analysis of Stakeholder Engagement for M&E.....	153
4.7.7 Correlation between Stakeholder Engagement for M&E and Performance of County MHP.....	155
4.7.8 Regression Analysis of Influence of Stakeholder Engagement for M&E on Performance of Maternal Health Programmes	155
4.7.9 Findings from Qualitative Information	157
4.8 Capacity Building for M&E and Performance of County MHP	159
4.8.1 Technical Expertise in M&E and Performance of County MHP.....	159
4.8.2 Training and Supervision and Performance of County MHP	161
4.8.3 M&E Workforce Development Plan and Performance of County MHP.....	163
4.8.4 IT Infrastructure and Performance of County MHP	166

4.8.5 M&E Capacity Assessment and Performance of County MHPS	167
4.8.6 Overall Descriptive Analysis of Capacity Building for M&E.....	169
4.8.7 Correlation between Capacity Building for M&E and Performance of Maternal Health Programmes.....	171
4.8.8 Regression Analysis of Influence of Capacity Building for M&E on Performance of Maternal Health Programmes.....	171
4.8.9 Findings from Qualitative Information	173
4.9 Data Management for M&E and Performance of Maternal Health ProgrammesMHP	174
4.9.1 M&E Indicators Selection and Performance of County MHP	174
4.9.2 Routine Data Collection & Tools and Performance of County MHP	176
4.9.3 Data Storage & Analysis and Performance of County MHP.....	178
4.9.4 M&E Information Dissemination and Performance of Maternal Health Programmes.....	180
4.9.5 M&E Information Use and Performance of Maternal Health Programmes 183	
4.9.6 Overall Descriptive Analysis of Data Management for M&E.....	185
4.9.7 Correlation between Data Management for M&E and Performance of County MHP.....	187
4.9.8 Regression Analysis of Influence of Data Management for M&E on Performance of County MHP.....	187
4.9.9 Findings from Qualitative Information	189
4.10 Combined Monitoring and evaluation Influence Performance of Maternal Health Programmes in Kenyan County Governments	190
4.10.1 Correlation between Combined Monitoring and evaluation and Performance of County MHP.....	191
4.10.2 Regression Analysis of Influence of Combined Monitoring and evaluation on Performance of Maternal Health Programmes	191
4.11 Contextual Determinants and Performance of County MHP.....	194
4.11.1 Organizational Structure and Performance of County MHP	194
4.11.2 Organizational Culture and Performance of County MHP.....	196
4.11.3 Political-Legal Environment and Performance of County MHP	197
4.11.4 Communication Structure and Performance of County MHP.....	199
4.11.5 Organizational Strategy and Performance of County MHP.....	201

4.11.6 Overall Descriptive Analysis of Contextual Determinants.....	203
4.11.7 Correlation between Contextual Determinants and Performance of County MHP.....	205
4.11.8 Regression Analysis of Influence of Contextual Determinants on Performance of County MHP.....	206
4.12 Behavioural Determinants and Performance of County MHP.....	207
4.12.1 Implementer’s Knowledge, Skills & Competencies and Performance of County CHP	208
4.12.2 Implementer's Attitude & Practices and Performance of County MHP.....	209
4.12.3 Workload Management and Performance of County MHP	211
4.12.4 Staff Motivation and Performance of County MHP	214
4.12.5 Managerial Support and Performance of County MHP	216
4.12.6 Overall Descriptive Analysis of Behavioral Determinants.....	218
4.12.7 Correlation between Behavioral Determinants and Performance of County MHP.....	220
4.12.8 Regression Analysis of Influence of Behavioral Determinants on Performance of County MHP.....	221
4.12.9 Findings from Qualitative Information	222
4.13 Moderating Influence of Contextual Determinants on Relationship between Monitoring and evaluation and Performance of County MHP.....	224
4.14 Moderating Influence of Behavioural Determinants on Relationship between Monitoring and evaluation and Performance of CMHPs.....	228
4.15 Discussion of Findings	234
4.15.1 Planning for M&E and Performance of Maternal Health Programmes in Kenyan County Governments	235
4.15.2 Stakeholders Engagement in M&E and Performance of CMHP	236
4.15.3 Capacity Building for M&E and Performance of Maternal Health Programmes in Kenyan County Governments	237
4.15.4 Data Management for M&E and Performance of Maternal Health Programmes in Kenyan County Governments	239
4.15.5 Combined Monitoring and evaluation and Performance of Maternal Health Programmes in Kenyan County Governments	241
4.15.6 Contextual Determinants and Performance of Maternal Health Programmes in Kenyan County Governments	242

4.15.7 Behavioral Determinants and Performance of Maternal Health Programmes in Kenyan County Governments	243
CHAPTER FIVE	245
SUMMARY, CONCLUSION AND RECOMMENDATIONS	245
5.1 Introduction.....	245
5.2 Summary of Findings.....	245
5.2.1 Planning for M&E and Performance of Maternal Health Programmes in Kenyan County Governments	245
5.2.2 Stakeholders Engagement in M&E and Performance of Maternal Health Programmes in Kenyan County Governments	246
5.2.3 Capacity Building for M&E and Performance of Maternal Health Programmes in Kenyan County Governments	248
5.2.4 Data management for M&E and Performance of Maternal Health Programmes in Kenyan County Governments	249
5.2.5 Combined Monitoring and evaluation and Performance of Maternal Health Programmes in Kenyan County Governments	251
5.2.6 Contextual Determinants and Performance of Maternal Health Programmes in Kenyan County Governments	252
5.2.7 Behavioral Determinants and Performance of Maternal Health Programmes in Kenyan County Governments	253
5.2.8 Moderating Influence of Contextual Determinants on Relationship between M&E Practices and Performance of CMHP	254
5.2.9 Moderating Influence of Behavioral Determinants on Relationship between M7E Practices and Performance of CMHP	255
5.3 Conclusions.....	255
5.3.1 Planning for M&E and Performance of Maternal Health Programmes in Kenyan County Governments	255
5.3.2 Stakeholders Engagement in M&E and Performance of Maternal Health Programmes in Kenyan County Governments	256
5.3.3 Capacity Building for M&E and Performance of Maternal Health Programmes in Kenyan County Governments	256
5.3.4 Data Management for M&E and Performance of Maternal Health Programmes in Kenyan County Governments	256

5.3.5 Combined Monitoring and evaluation and Performance CMHP in Kenya	257
5.3.6 Contextual Determinants and Performance of Maternal Health Programmes in Kenyan County Governments	257
5.3.7 Behavioral Determinants and Performance of Maternal Health Programmes in Kenyan County Governments	258
5.3.8 Moderating Influence of Contextual Determinants on Relationship between M&E Practices and Performance of CMHP	258
5.3.9 Moderating Influence of Behavioral Determinants on Relationship between M&e Practices and Performance of CMHP	258
5.4 Contributions of the Study to Knowledge	260
5.5 Limitations of the Study	264
5.6 Recommendations of the Study	264
5.6.1 Recommendations for Policy	264
5.6.2 Recommendations for Practice	265
5.6.3 Recommendations for Methodology	266
5.6.4 Recommendations for Theory	267
5.7 Suggestions for Further Research	268
REFERENCES.....	269
APPENDICES	288
Appendix I: Transmittal Letter	288
Appendix II: Research Permit from NACOSTI.....	289
Appendix III: Research Authorization Letters	290
Appendix IV: Sampled Counties	298
Appendix V: Research Questionnaire For County Maternal Health Program Staff	300
Appendix VI: Interview Guide	315
Appendix VII: Observation Guide	318
Appendix VIII: List of Sampled health facilities.....	319
Appendix IX: Validity and Reliability Analysis Test Results.....	323

LIST OF TABLES

Table 2. 1: Summary of Research Gaps	68
Table 3. 1: Target Population Distribution.....	83
Table 3. 2: Sampling Design	84
Table 3. 3: Statistical Tests of Hypotheses.....	96
Table 3. 4: Operationalization of the Variables	99
Table 4.1: Return Rate.....	102
Table 4.2: Gender of the Respondent.....	103
Table 4.3: Age Bracket of the Respondent	104
Table 4.4: Religious Affiliation of the Respondent	104
Table 4.5: Highest Level of Academic Qualifications of the Respondent.....	105
Table 4.6: Number of Years in the County Maternal Health Programmes	106
Table 4.7: Profession of the Respondent.....	106
Table 4.8: Distribution of Respondent by Sections they cover.....	107
Table 4.9: Checking for Normality.....	108
Table 4.10: Levene Test Results	109
Table 4.11: Autocorrelation Test.....	109
Table 4.12: Collinearity Statistics.....	110
Table 4.13: Kaiser-Meyer-Olkin (KMO) and Bartlett's Test.....	111
Table 4.14: Quality of Care and Service Delivery	113
Table 4.15: Achievement of Maternal Health Indicators	115
Table 4.16: Achievement of Child Health Indicators	117
Table 4.17: Level of Patient & Employee Satisfaction	118
Table 4.18: Operational Efficiency.....	120
Table 4.19: Means and Standard Deviations of Performance of Maternal Health Programmes.....	122
Table 4.20: Budgeting, Resource Mobilization & Allocation and Performance of County MHP.....	124
Table 4.21: M&E Frameworks and Performance of Maternal Health Programmes	126
Table 4.22: M&E Work Plans and Performance of County MHP	129
Table 4.23: M&E Policy and Performance of Maternal Health Programmes	131

Table 4.24: Strategic Planning in Support of M&E and Performance of County MHP	133
Table 4.25: Means and Standard Deviations of Planning for M&E	135
Table 4.26: Correlation between Planning for M&E and Performance of County MHP	137
Table 4.27: Planning for M&E and Performance of Maternal Health Programmes	138
Table 4.28: Stakeholder Engagement for M&E and Performance of Maternal Health Programmes	141
Table 4.29: Stakeholder Identification & Analysis and Performance of County MHP	143
Table 4.30: Stakeholder Communication and Performance of Maternal Health Programmes.....	146
Table 4.31: Collaborations and Performance of Maternal Health Programmes ..	148
Table 4.32: Community Participation and Performance of County MHP	151
Table 4.33: Means and Standard Deviations of Stakeholder Engagement for M&E	153
Table 4.34: Correlation between Stakeholder Engagement for M&E and Performance of County MHP.....	155
Table 4.35: Stakeholders engagement in M&E and Performance of Maternal Health Programmes	156
Table 4.36: Technical Expertise in M&E and Performance of County MHPS..	159
Table 4.37: Training and Supervision and Performance of Maternal Health Programmes.....	162
Table 4.38: M&E Workforce Development Plan and Performance of County MHP	164
Table 4.39: IT Infrastructure and Performance of Maternal Health Programmes	166
Table 4.40: M&E Capacity Assessment and Performance of County MHP	167
Table 4.41: Means and Standard Deviations of Capacity Building for M&E	169
Table 4.42: Correlation between Capacity building for M&E and Performance of Maternal Health Programmes.....	171
Table 4.43: Capacity building for M&E and Performance of Maternal Health Programmes.....	172

Table 4.44: M&E Indicators Selection and Performance of County MHP	174
Table 4.45: Routine Data Collection & Tools and Performance of County MHP	176
Table 4.46: Data Storage & Analysis and Performance of Maternal Health Programmes.....	178
Table 4.47: M&E Information Dissemination and Performance of County MHP	180
Table 4.49: M&E Information Use and Performance of County MHP.....	184
Table 4.50: Means and Standard Deviations of Data Management for M&E	185
Table 4.51: Correlation between Data Management for M&E and Performance of Maternal Health Programmes.....	187
Table 4.52: Data Management for M&E and Performance of Maternal Health Programmes.....	188
Table 4.53: Correlation between Monitoring and evaluation and Performance of County MHP.....	191
Table 4.54: Combined Monitoring and evaluation and Performance of County MHP	193
Table 4.55: Organizational Structure and Performance of County MHP	194
Table 4.56: Organizational Culture and Performance of Maternal Health Programmes.....	196
Table 4.57: Political-Legal Environment and Performance of County MHP	198
Table 4.58: Communication Structure and Performance of Maternal Health Programmes.....	200
Table 4.59: Organizational Strategy and Performance of Maternal Health Programmes.....	202
Table 4.60: Means and Standard Deviations of Contextual Determinants	204
Table 4.61: Correlation between Contextual Determinants and Performance of Maternal Health Programmes.....	205
Table 4.62: Contextual Determinants and Performance of CMHP.....	207
Table 4.63: Implementer's Knowledge, Skills & Competencies and Performance of Maternal Health Programmes	208
Table 4.64: Implementer's Attitude & Practices and Performance of County MHP	210
Table 4.65: Workload Management and Performance of County MHP.....	213

Table 4.66: Staff Motivation and Performance of Maternal Health Programmes	215
Table 4.67: Managerial Support and Performance of County MHP.....	217
Table 4.68: Means and Standard Deviations of Behavioral Determinants	219
Table 4.69: Correlation between Data management for M&E and Performance of Maternal Health Programmes.....	220
Table 4.70: Participation in Behavioral Determinants and Performance of Maternal Health Programmes.....	222
Table 4.71: Combined Monitoring and evaluation and Performance of Maternal Health Programmes in Kenyan County Governments	225
Table 4.72: Combined Monitoring and evaluation, Contextual Determinants and Performance of CMHP.....	227
Table 4.73: Combined Monitoring and evaluation and Performance of Maternal Health Programmes in Kenyan County Governments	229
Table 4.74: Combined Monitoring and evaluation, Behavioral Determinants and Performance of CMHP.....	232
Table 4.75: Summary of Hypothesis Testing and Results	233
Table 5.1: Contributions of the Study to Knowledge	260

LIST OF FIGURES

Figure 1: Conceptual Framework	64
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LIST OF ABBREVIATION AND ACRONYMS

AEE:	African Evaluation Association
AIDS:	Acquired immunodeficiency syndrome
ANC:	Antenatal care
AVU:	African Virtual University
CFA:	Confirmatory Factor Analysis
CMHP:	County Maternal Health Programmes
CHMT:	County Health Management Team
CIAT:	International Center for Tropical Agriculture
CSR:	Corporate Social Responsibility
DAC:	Development Assistance Committee
EPM:	Environmental Performance Measurement
e-ProMIS:	Electronic Project Monitoring Information System
ESP:	Essential Service Package
FAO:	Food and Agriculture Organization
GOK:	Government of Kenya
HIS:	Health Information System
HIV:	Human Immunodeficiency Virus
ICT:	Information and Communications Technology
ICTs:	Information and Communication Technologies
IFAD:	International Fund for Agricultural Development
ILO:	Organizational Labor Organization
INTRAC:	International NGO Training and Research Centre
IT:	Information Technology
KDHS:	Kenya Demographic and Health Survey
KNCHR:	Kenya National Commission on Human Rights
KNCHR:	Kenya National Commission on Human Rights
LDCs:	Least Developed Countries
LMICs:	Low- and Middle-Income Countries
MED:	Monitoring & Evaluation Department
M&E:	Monitoring and Evaluation
MCH:	Maternal Child Health
MHP:	Maternal Health Programmes

MMR:	Measles, Mumps, and Rubella
MNP:	Multinational Project
MPIs:	Managerial Performance Indicators
NACC:	National AIDS Control Council
NARC:	National Rainbow Coalition
NEA:	National Employment Authority
NGOs:	Non-Governmental Associations
NGOs:	Non-governmental organizations
NHSSP:	National Health Sector Strategic Plan
NIMES:	National Integrated Monitoring and Evaluation System
OECD:	Organization for Economic Co-operation and Development
OPM:	Office of the Prime Minister
PASSIA:	Palestinian Academic Society for the Study of International Affairs
PBO:	Projected benefit obligation
PCA:	Principal Component Analysis
PDA:	Personal Digital Assistants
PETS:	Public Expenditure Tracking System
PIM:	Project Implementation Manual
PIP:	Project Implementation Plan
PM&E:	Participatory Monitoring and Evaluation
PMI:	Project Management Information
PMIS:	Project Management Information System
RBM:	Results-based management
MDGs:	Millennial Development Goals
SDGs:	Sustainable Development Goals
SFCG:	Search for Common Ground
STD:	Sexually Transmitted Disease
UNDP:	United Nations Development Programme
UNFPA:	United Nations Population Fund
UNICEF:	United Nations International Children's Emergency Fund
USA:	United States of America
USAID:	United States Agency for International Development
VUCCnet:	Virtual University for Cancer Control Network
WHO:	World Health Organization

ABSTRACT

Maternal Health is a significant and central human right and a vital element of sustainable development. Inefficiency in M&E is among the significant management stages have significantly contributed to operations failure in government institutions. Inefficiency in M&E is among the significant management stages have significantly contributed to operations failure in government institutions. The study therefore purposes to the relationship between monitoring and evaluation, contextual and behavioural determinants and performance of maternal health programmes (MHP) in Kenyan County Governments. The objectives of the study were to; establish how planning for M&E, stakeholder engagement, capacity building for M&E, contextual determinants and behavioral determinants influence performance of MHP in Kenyan County Governments, examine the moderating influence of contextual determinants and behavioral determinants on link amid practices for monitoring and evaluation and performance of MHP in Kenyan County Governments and assess the combined moderating influence of contextual determinants and behavioral determinants on link of practices for monitoring and evaluation and performance of MHP in Kenyan County Governments. This study was anchored on the program theory, contingency theory, stewardship theory principal agent theory and the theory of constraints. Pragmatism served as the study's paradigm. A mixed method research design was used in this study. The study targeted 388 hospitals from nine counties (Appendix IV). The unit of analysis was 1165 people, including employees from level 4 and 5 hospitals. Stratified random sampling was used to obtain 282 respondents. The research instruments for the study included a self-administered structured questionnaire, interview guides and an observation guide. Using descriptive narratives, qualitative data was evaluated within specific topics. Measures of central tendencies and measures of dispersion were used to descriptively assess quantitative data. The study hypotheses were tested using regression. Frequency tables were used to present the data. The qualitative data revealed that resources were allocated by gathering information and assessment in order to meet the desired goals, through use of indicators of tracking processes and progress within each public sector departments, and efficiency in delivery and performance is the policy statement. The study discovered a high relationship between county maternal health program success and M&E planning ($r=0.859$, $p=0.000<0.05$); stakeholder participation in M&E ($r=0.838$ and $p=0.000<0.05$); capacity building for M&E ($r=0.796$, $p=0.000<0.05$); data management for M&E($r=0.855$, $p=0.001<0.05$); contextual determinants ($r=0.877$, $p=0.002<0.05$) and behavioral determinants ($r=0.843$, $p=0.012<0.05$). The study discovered that when contextual determinants were introduced into the relationship and the interaction terms in model 3 rised the R square by 0.141. This means that the interaction amid contextual determinants and combined M&E practices describes 14.1% alterations in performance of CMHP. The research found that after introduction of behavioural determinants into the link, and the interaction term in model 3 rose the R square by 0.066. This denotes that the collaboration between behavioral determinants and combined M&E practices describes 6.6% variations in performance of CMHP. The study concluded that planning for M&E had the greatest influence on the performance of MHP, followed by data management for M&E, then stakeholder's engagement in M&E, while capacity building for M&E had the least influence. For the program's effectiveness, the study suggests that management develop an effective methodology as well as raise awareness of M&E activities.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The rapid globalization of the economy has resulted into demand increase in the monitoring and evaluation solutions all over the globe as an essential dynamism to enhance performance of maternal health programmes (MHP). Monitoring is a progressive activity that makes use of the systematic collection of information on specified indicators to give management and key stakeholders with indications of the level of advancement and accomplishment of goals, as well as advancement in the usage of allocated finances, in an ongoing development intervention (Kang, Cho, Rahman & Dutta, 2020). Evaluation is the orderly and impartial evaluation of a continuing or finished project, program, or policy, comprising its design, execution, and outcomes. Monitoring and evaluation are essential to any project or program. Through this process, organizations collect and analyze data, and determine if a project/program has fulfilled its goals. Monitoring begins right away and extends through the duration of the project. Evaluation comes after and assesses how well the program performed. Every organization should have a monitoring and evaluation (M&E) system in place. This study assessed the influence of practices of monitoring and evaluation (M&E) and performance of maternal health programmes in Kenyan County Governments and the moderating influence of contextual and behavioral determinants.

The evaluation ideologies are essential in the improvement of outcomes of the county Maternal Health programmes (MHP). As a result, developing countries are investing all of their efforts into improving the current monitoring and evaluation mechanisms. According to World Health Organization (WHO) (2015), every country requires a robust M&E system for tactically managing its health sector. This system must encompass all major programs and health-related activities. These systems are required to deal with better data as well as to assure managerial effectiveness and accountability. Despite the fact that many countries lack a powerful M&E system, this limits their ability to use the system effectively.

Monitoring and evaluation ensure that projects outcomes can be quantified at the impact, outcome, output, process, and input levels, providing a framework for

accountability and assisting in deciding knowledgeable program and policy decisions (Karanja & Yusuf, 2018). The study determined the influence of planning for M&E, engagement of stakeholder, capacity development for M&E, M&E data use, moderating influence of contextual determinants and behavioral determinants on performance of maternal health programmes in Kenyan County Governments.

Over the last ten years, some progress has been made on Millennium Development Goals (MDGs) four and five. These accomplishments, however, are inconsistent between areas and countries. Both infant and maternal mortality have been on the rise in recent years (UNICEF, 2016). As a result of this awareness, governments and development agencies have expanded their determination to design and execute numerous maternal child health (MCH) programs in order to reduce the proportion of mothers who die, the pain of poor births, and the grief of lose of a children (WHO, 2017). Globally, studies by experts such as Akhter (2015) and Chowdhury (2015) have compared the implementation of MCH programs in African countries. According to Akhter, difficulties associated to pregnancy and deliveries are responsible for more fatalities and disabilities in Bangladesh more than other reproductive health issue. This situation is deteriorating as the population grows and County maternal health programme (CMHP) have been administered in a haphazard and ineffective way for the past two decades. According to UNFPA (2015), the nation is losing its luster in terms of fulfilling the Sustainable Development Goals (SDGs) due to a lack of accessibility to contemporary health services or poor planning and execution of MCH programs.

The introduction of CMHP compelled the Burundi government to borrow an additional \$23.6 million from the World Bank in 2008/2009 to enlarge the MHP, which began in 2006, train an additional 310 nurses and 34 doctors in universities in Kenya between 2005 and 2010, get affordable but greatly matched technology from China and Japan, expand its road networks, electricity and clean water infrastructures to the MCH centres/clinics by 37% between 2005 and 2011, as well as radio and television programs that educated mothers about the dangers of giving birth at home. These were among the elements that have have highly impacted the execution of MCH programmes to 41% from 2005 to 2013 and the nation has witnessed a decrease in maternal fatalities and infant mortality rates decreased by 46.12% between the said years (UNICEF, 2016). These have been the general east Africa trends.

Although governments have made efforts to raise common individuals accessibility to health care through a program like the Essential Service Package (ESP), healthcare service uptake and the execution of numerous health initiatives, more so those targeting children and women are still below the acceptable levels in Kenya (World Bank, 2018). Making of health services and the execution of highly recommended MHP by numerous donors and the government has been a complex behavioral phenomenon since the 1990s (UNICEF, 2016). Services in the medical field in relation to studies on curative and preventative services make use of it often linked to availability of treatment, cost, quality, and attitudes, social structure and the user's distinctive features.

1.1.1 Monitoring and Evaluation

Monitoring and evaluation procedures guarantee that project outputs can be quantified at the impact, outcome, output, process, and input levels, providing a framework for accountability and assisting in making informed program and policy decisions. Monitoring and evaluation are seen as part of design programs by the International Fund for Agricultural Development (IFAD) (2017) because they ensure logical reporting; the procedure that connects result and shows accountability, quantifies efficiency and effectiveness, ensures effective distribution of resources, and stimulates continuous learning while also enhancing believability. M&E is a continuous function of management for assessing whether there is an expected result achievement progress in a bid of spotting the challenges facing the execution as well as highlighting if there exist any unexpected impacts from the plan of the investment, program or project and its activities. A monitoring and evaluation plan incorporate several accepted best practices in M&E system (Scheirer, 2017). Practices are a collection of actions such as planning and coordination, capacity building, surveillance, and data demand that can help with project decision-making and learning, which has an impact on project sustainability.

Planning identifies resources and costs them. Projects may be initiated by government, but it is the end user who has to put things in order for guaranteed performance and eventual sustainability. If planning is not going on its bound to affect performance and sustainability. The M&E plan, which a description of the functions has needed to obtain the required data on the set indicators and the required methods (Hancock,

Veguilla, Lu, Zhong, Butler, Sun & Brammer, 2016). According to WHO (2017), the maternal health M&E systems in particular, require enhancement in several critical dimensions namely; accuracy and completeness of morbidity and mortality data; timeliness of data; processing and analysis; and reporting, use and archiving.

1.1.2.1 Planning for Monitoring and Evaluation

A monitoring and evaluation (M&E) plan describes how the County maternal programs' entire M&E system works. This includes the factors, who is responsible for getting them, the tools and forms to be used, and how information will be dispersed within the company. An M&E Plan is a table that expands on the log frame of a project/program to detail key M&E requirements for each indicator and assumption. It enables program staff on the ground to track progress toward specific goals for greater transparency and accountability.

This M&E planning module is designed to provide clear instructions on manner to form a thorough M&E system for international humanitarian relief and development efforts. It includes the core planning papers and processes required to set up and implement an M&E system for the planning, implementation, and evaluation of county maternal programs (World Health Organization, 2016). It's intended for M&E specialists, humanitarian and development program managers, and decision-makers vested with the duty of funding and program management.

1.1.2.2 Stakeholder Engagement for Monitoring & Evaluation

Stakeholder engagement is the process through which an organization involves people who may be impacted by its choices or who can influence how they are implemented (Burke, 2017). Stakeholder participation is critical in a good M&E system in maternal health programs in developing countries, as it aids in determining if county maternal health programs have reached their goals, spent their money properly, and are deserving of additional investment.

A good M&E system, in its most basic form, begins with a thorough grasp of the project idea, continues with a robust, comprehensive implementation plan that includes monitoring activities, and concludes with an evaluation to determine efficacy and impact. Those that care about a project, it seems logical, should be active in the M&E system. This isn't always the case, though. Donors may claim that they lack the

time or resources to engage. It's possible that implementation partners won't be able to properly submit accurate data (Alexander, 2016). Furthermore, project beneficiaries may simply be unaware of the process.

1.1.2.3 Capacity Building for Monitoring & Evaluation

If accountability mechanisms are in place or given significant consideration, monitoring and evaluating performance can be an incentive for the creation of improved delivery capacities. This has been attributed to the lack of glamour associated with measuring and comprehending the capacity-building process (compared to measurement of its apparent results, including improved performance). Another barrier to a thorough examination of the concept of 'capacity' is that it is primarily a subjective judgement based on incomplete or partial data. Polidano (2020) investigated the viability of developing comparable indices of state and public sector capability in policy formulation, implementation, and operational efficiency. Organizational capacity development entails more than just training; it can also include a variety of planning and delivery alternatives, depending on the context and need of the business. As a result, before delving deeper into M&E training resources.

Visioning, sensitive intelligence, interactive skill, dynamic leadership, interpersonal influence, honesty, quality management, and document and agreement administration are all skills that contribute to outstanding project performance (Ochieng, Rambo & Osogo, 2018). Project managers can use the result as a criterion for assigning project managers with the "correct" skill profile or focusing human resource development on skills that are critical to project success (UNFPA, 2018). Employee competence is a big stumbling block when it comes to deciding on M&E methods. As a new instrument in the project management area, M&E has hurdles in achieving long-term results and outputs (Gorgens & Kusek, 2016). There is a significant shortage of qualified M&E professionals, M&E system capacity building, and coordination of project management courses and technical assistance.

1.1.2.4 Data Management for Monitoring & Evaluation

Statistics are an important part of any program or policy evaluator's toolset (Mutekhele, Rambo & Ongati, 2018). If evaluators are to make good use of consultants' findings, interact effectively with funders, and comprehend other people's

assessment reports, they must often have a conceptual understanding of very complicated, newly created statistical procedures.

The process of gathering data that are generated from various activities implemented by an organization and is relevant to an organization's M&E framework. This involves obtaining data from original sources and using tools (paper or electronic) to collate, analyze, and report the data. Fortifying the M&E structure in relationship by using Management Information Systems (MIS) depends energetically on mechanical movements (INTRAC, 2016). It needs articulating a MIS thought, describing clear goals and making a fantasy to change manual system into electronic (modernized) structure focused on significant enhancement in the transport of organizations. It is the reason diverse entertainers are looking to data and correspondence development to fabricate the viability, speed and exactness of data social affair, amassing and examination.

1.1.2 Contextual Determinants Performance of Maternal Health Programmes

Contextual factors are features that describe an organization's internal and external settings and can have a greater impact on organizational behavior and outcomes. The structure of the firm is mainly seen to show configuration of activities that is usually definite and durable; the firm structure main quality is its integral orderliness (Ogollah, 2017). The health authorities goal structure is divided into work, tasks and duties between firm members, therefore, structuring their activities to be able to work towards a similar goal. The structure of an organization includes jobs, authority to fulfill work functions, logical job grouping, management control span, and coordination methods (Dolan, 2019). As a result, when putting in place a technology plan, the organization's structure should be considered. This includes decisions made on the basis of roles in County MHP and divisions, the manager control span, and the control ways of the structure.

The role of leadership in the County MHP of health is critical in improving the organization's performance as well as increasing its proficiency and value. The capability of leadership is there in personal and collective levels, whose combination results to firm leadership (Kivipold, 2015). Leadership forms a great part of the organization in general, with collective leadership qualities integrated in the systems

of an organization and its structure. Researchers that concentrated on technological leadership reform in academic institutions emphasize the importance of Information technology (IT) implementation, not just for IT implementation, but for IT implementation that is successful.

1.1.3 Behavioral Determinants

Organization administration has a major role of manipulating the staff conduct at the place of work. It is the leaders' responsibility of setting the team members direction. In most situations, it is viewed that staff do not have a feeling of working when their bosses are very strict (Nitithamyong & Skibniewski, 2015). This calls for team support all the time as well as guidance and assistance in the operations on daily basis in a bid of assisting them in skills acquisition and knowledge upgrading.

In health officials, on- job experience as well as official training are commanding the rise of the evaluators in training and development opportunities selections in County Maternal Health Programmes that comprise of: the public and private sector, institution of higher education, professional bodies, assignment of jobs as well as programmes for mentoring. Raja (2016) revealed that organizational support level for systems of performance by the staff and desire of backing the members of the team to attain their goals are aspects which may be utilized in assessing the attitude of an individual in regard to their job. In this study, employees' support level on the performance contract (PC) system was utilized in assessing the attitude of the executor. However, the staffs' support level on performance systems of an organization was recognized as the assessor of the work attitude of an individual.

M&E staff needs the expertise of comprehending the frameworks of M&E, identification as well as performance indicators development, quarterly reports undertaking, evaluation conduction, structures of work breakdown development, performance appraisals undertaking, report writing as well as monitoring and evaluation auditing. Proudlock (2016) as well revealed that the impact evaluation whole process and above all the analysis and results interpretation may be highly enhanced by intended beneficiaries' participation. According to Oyugi (2016), involving local inhabitants in project monitoring will improve the degree of satisfaction for project beneficiaries. For the staff to be happy as well as positive at job, they need a comfortable where the laws are applied fairly to each staff. The staff

should be motivated to obey the chain of command as well as adherence to ethical issues.

1.1.4 Programmes Performance

Performance is the accumulation of the outcomes for the work processes and activities of the organizations. The performance of an organization includes the actual output or organization results as assessed against its expected results (or goals and objectives). It refers to how well a company converts inputs into outputs, as well as the actual results as compared to the desired outcomes. As per Richard et al. (2016), the performance of an organization includes specific firm outcomes areas. There is little agreement on its definition, dimensionality, or measurement, which impedes research and comprehension of the notion.

Maternal Health Programme is fruitful when it effectively achieves its objectives by use of limited resources that results to competence. Thus, the concept of Maternal Health Programmes performance is a set indicator that gives data on the goal achievement degree as well as outcomes; it should also be active, necessitating ruling as well as clarification, as shown by use of causal model which explains how the existing actions might influence the projected outcomes. The understanding of the performance might vary from a person to another liable on their involvement in performance of maternal health programmes assessment which is in comparison to an outside one. The performance concept is essential in knowing its fundamentals features at every part of accountability as well as reporting government institution level success it is essential to have the ability of quantifying the outcomes (Richard et al., 2016). Performance assessment of the County Maternal Health Programmes is more efficient when there is an appropriate design of assessment to comprise many parts as well as structuring it in way that assists directors in understanding the inter-linkages and strategy reflection.

1.1.5 Devolved Maternal Health Programmes in Kenya

County governments were established in March 2013 following Kenya's new Constitution's first general elections (2015). County governments are required by the constitution to plan and budget for the supply of goods and services as part of their duty. According to USAID (2018), in Kenya, MCH programmes have been given priority since the National Rainbow Coalition (NARC) government came into power

in 2002. However, the implementation of the MCH programmes in the country has faced a number of challenges unlike the universal health programmes implementation, leading to more deaths than survivals. This might be readily addressed by providing high-quality health-care delivery that ensures women deliver safely and avoids the majority of difficulties associated with childbirth (UNFPA, 2015). All expecting mothers are at risk of experiencing unanticipated problems during childbirth, but almost all of these complications can be treated by competent birth attendants in well-equipped health facilities; yet, only around 43% of all deliveries in Kenya take place in health facilities (KDHS, 2016). Investment in maternal-child health-care programs is critical for generating economic growth and lowering poverty rates in the country.

The county hospitals serve as referral centers for the district hospitals. These are regional facilities that offer specialized services such as intensive care, life support, and specialist consultations. Many hospitals have a policy of not allowing those who have not paid their bills to leave, and armed guards may prohibit them from doing so. Kenya has a maternal death rate of 530 per 100,000 births in 2010. In comparison, in 2008, the number was 413.4, and in 1990, it was 452.3. The under-5 death rate is 86 per 1,000 births, with neonatal mortality accounting for 33 percent of under-5 mortality. In Kenya, the number of midwives per 1, 00000 live births is unknown, and pregnant women have a one-in-380 chance of dying during their lifetime. Performance of County Maternal Health Programmes (MHP) will be assessed using service quality levels, accomplishment of result indicators, rate of satisfaction of customers, rate of staff satisfaction and cost within budget.

The National Integrated Monitoring and Evaluation System (NIMES) is led and coordinated by Monitoring & Evaluation Department (MED), which ensures that two critical sources of M&E data, the Annual Progress Reports (APR) on Vision 2030's Medium-Term Plan and the Annual Public Expenditure Review (PER), are generated correctly and on schedule. In Kenya, 53% of mothers still give birth away from a modern health centre (Moindi, Ngari, Nyambati & Mbakaya, 2015). This happens even though records show that up to 88% of mothers live within five kilometers or less to a health facility. 93% mothers on the other hand have visited antenatal care (ANC) at least once during their pregnancy. Higher education level, optimal ANC services attendance and insurance cover increase the chance of delivering in a health facility.

Provision of healthy maternity solutions through illness prevention and health maintenance that residents require. It provides flu vaccines to the elderly as well as help to pregnant mothers in order to reduce newborn mortality. The County Maternal Health Program also provides regular exams and immunizations for babies. The County Maternal Health Program also contributes to the creation of policies and standards that address the community's health barriers in order to keep them safe. Furthermore, the government has devised effective methods of assisting in the resolution of health issues, particularly now that the directorate has a significant role in monitoring and evaluating the performance of the CMHP (WHO, 2015). M&E curriculum is also planned to be embraced by a number of higher education institutions, which will help to ensure that employees and Kenyans receive proper M&E training.

1.2 Statement of the Problem

Maternal Health is a significant and central human right and a vital element of sustainable development. MHPs implementation have faced been hindered by poor infrastructures, insufficient finances from the central government and sponsors, absence of sufficient skilled personnel to deal with the expectant mothers' situations and their children, poorly informed clients especially those in rural areas on services on maternal health and their importance, the level of technology employed in these MCH units that is poor, poorly developed infrastructure like laboratories and theaters. M&E systems have globally contributed to the improvement of Maternal Health through tracking and evaluating the various challenges that mostly affect the low developed countries. Inefficiency in M&E is among the significant management stages have significantly contributed to operations failure in government institutions (Epstein, 2018). This is due to an emphasis on monitoring the implementation process and progress toward meeting the goals of the project.

Regardless of the Kenyan government's efforts to uphold MHP, results are still lacking. Failure in M&E operations jeopardizes Kenya's 2030 Vision plans for a population that is healthy that contributes to the nation's development. Moreover, the poor results experienced in Kenya, on the other hand, is moving for universal health care worldwide by 2030. The Social Pillar of Kenya Vision 2030 aims to invest in people in order to improve Kenyans quality of life by concentrating on numerous

social and human welfare programs and projects, health included as a key area. Universal health coverage is among the four key aspects of concentration for the present administration in the Big4 Agenda, which aims to scale up health services in Kenya, including County Maternal Health Services. County Maternal Health has also gained national and county support, more so over the Beyond Zero Campaign effort, which aimed to eradicate preventable deaths between children and women by prioritizing policy, allocating resources, and improving delivery of services. By mobilizing private and public sector contributions, catalyzing innovation and fast-tracking action by political leaders and stakeholders, and promoting leadership and accountability at the family, community, and national levels for the full execution of Kenya's Human Immunodeficiency Virus (HIV), maternal, and child health policies, the campaign aimed to build on existing health and community systems.

In Kenya, as in many Low- and Middle-Income Countries (LMICs), pregnancy-related complications constitute the principal causes of morbidity and mortality amongst women, translating to 362 maternal deaths per 100 000 live births (Banke-thomas, Maua, Madaj, Ameh, & Broek, 2020). Currently an estimated 6,300 women die annually during pregnancy and childbirth in Kenya, a tragic number that reflects inadequate progress toward providing essential health services to all women (National-Council-for-Population-and-Development [NCPD], 2015). Kenya National Commission on Human Rights (KNCHR), published in 2009, aims to lower the maternal mortality ratio (MMR) to a minimum of 147 fatalities per 100,000 live births by 2015, and increase the percentage of women receiving good care in the period of their delivery to 90%. When compared to the 2008 Kenya demographic and health survey-maternal mortality ratio (KDHS-MMR) of 488 fatalities per 100,000 live births, the goal has yet to be attained.

Prior to the execution of MHP in Kenya, about 20% of births happened in health institutions, with about 7 percent of novel births being undertaken by health staff with the skills and have training in neonatal activities and 22 percent being delivered in health centres with adequate infrastructure (KDHS, 2016). The Constitution has also identified monitoring and evaluation (M&E) as a key component in operationalizing activities to ensure transparency, integrity and access to information, and in promoting accountability principles at all levels of health care service delivery. M&E therefore remains a key component of any program that aims to continuously improve and

provide better outputs and outcomes for its beneficiaries. This is especially in tracking the progress and lessons learnt from the implementation of the Universal Health Coverage and other health interventions. In the health sector, several studies have highlighted the need to strengthen the M&E systems for effective implementation of health programs. The health sector has made a concerted effort to improve its approach to M&E, which has been supported by the provisions of the Constitution of Kenya 2010 and subsequent devolution laws. The units for M&E are yet to be functional in certain counties, and in areas where they are operational, they might lack the requisite skills and capabilities. The reports of M&E produced by counties with the units are improperly coordinated, leading in the usage of disparate M&E concepts and terminologies. The CMHP continue to face challenges due to the said problems. The proportion of women and girls death due to childbirth and associated pregnancy causes is very high at 510 per 100,000 live births. As part of the SDG, the objective is to decrease maternal deaths globally to below 70 per 100 000 live births amid 2016 and 2030.

Studies done on practices of M&E include; Likalama (2017) carried out a survey of chosen private learning institutions in Botswana to examine the influence of M&E on financial performance. Using the example of Constituency Development Fund Projects in Kakamega County, Barasa (2014) evaluated the influence of M&E capacity development on project conclusion in Kenya. The research failed to focus on monitoring and evaluation and performance of CMHP, as well as the moderating impact of environmental and behavioral variables. Therefore, this study sought at contributing to the knowledge of the moderating influence of contextual and behavioral determinants on the association between monitoring and evaluation and performance of maternal health programmes in Kenyan County Governments.

1.3 Purpose of the Study

The purpose of the study was to establish the relationship between monitoring and evaluation, contextual and behavioural determinants and performance of maternal health programmes in Kenyan county governments.

1.4 Objectives of the Study

This study was guided by the following objectives:

- i. To establish how planning for M&E influences performance of maternal health programmes in Kenyan County Governments
- ii. To determine to the extent to which stakeholders engagement in M&E influence performance of maternal health programmes in Kenyan County Governments.
- iii. To assess how capacity building for M&E influence performance of maternal health programmes in Kenyan County Governments.
- iv. To establish how data management for M&E influence performance of maternal health programmes in Kenyan County Governments.
- v. To examine the extent to which the combined monitoring and evaluation influence performance of maternal health programmes in Kenyan County Governments.
- vi. To establish how contextual determinants influence performance of maternal health programmes in Kenyan County Governments.
- vii. To determine how behavioral determinants influence performance of maternal health programmes in Kenyan County Governments.
- viii. To examine the moderating influence of contextual determinants on relationship between monitoring and evaluation and performance of maternal health programmes in Kenyan County Governments.
- ix. To establish the moderating influence of behavioral determinants on relationship between monitoring and evaluation and performance of maternal health programmes in Kenyan County Governments.

1.5 Research Hypotheses

The study sought to test the following research hypotheses;

- H₀₁: Planning for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments
- H₀₂: Stakeholder engagement for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments
- H₀₃: Capacity building for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments.
- H₀₄: Data management for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments.
- H₀₅: Combined monitoring and evaluation doesn't significantly influence performance of maternal health programmes in Kenyan County Governments

H₀₆: Contextual determinants do not significantly influence performance of maternal health programmes in Kenyan County Governments.

H₀₇: Behavioral determinants do not significantly influence performance of maternal health programmes in Kenyan County Governments.

H₀₈: Contextual determinants do not significantly moderate the relationship between monitoring and evaluation and performance of maternal health programmes in Kenyan County Governments.

H₀₉: Behavioral determinants do not significantly moderate the relationship between monitoring and evaluation and performance of maternal health programmes in Kenyan County Governments.

1.6 Significance of the Study

The findings of the study would be important to the management of County Maternal Health Programmes and brings clarity on managerial level staff of organization's role in enhancing the performance of County MHP.

The study would give key data to administration in this sector regarding the association amongst the M&E practices and performance of the organization as well as its applicability in the County Maternal Health operations. The study would contribute to bring out the moderating effect of contextual and behavioral determinants on the association between M&E practices and performance of CMHP, enabling managers to respond appropriately to the context of M&E practices and performance of maternal health programmes.

The study would give a glimpse to policy makers concerning County Maternal Health Programmes; the Kenyan Government on the association amongst M&E and performance of County MHP and its application in the running of Health best practices. This would give them better understanding that while enlisting as well as relaying the essential laws and by lee way would assist in vision 2030 realization. The study would be beneficial to management who endeavor on advising the public institutions on the efficient applicability of M&E practices and performance of County MHP.

The study was hoped to enrich the existing knowledge of performance of County MHP by giving deductions on the relation amongst M&E practices and performance of the

organization in the context of unindustrialized nation. Other scholars would use the study results as a locus for future studies in regard to the firm level role characteristics as well as underpinning theories. The study would encourage the same study to be done on this subject and suggestion of other related areas. This study would as well contribute knowledge building among the youths in the management of project discipline and particularly on M&E which is a significant part of any project. This is as a result of the fact that without a good system for monitoring and evaluation, the project management would be unsuccessful.

1.7 Assumptions of the Study

The study assumed that planning for M&E, stakeholder engagement, capacity building for M&E, Data management for M&E, moderating influence of contextual determinants and behavioral determinants would influence performance of maternal health programmes in Kenyan County Governments. The study assumed that respondents would be willing to partake in the study. The respondents would fill the questionnaires with honesty and integrity which would enable collection of quality data.

Also the study assumed that the government officials more specifically those working in the public health department and those in the county department of health would not have conflicting issues with the study; owing to the fact that health sector in the country and specifically in the county has been blamed for long due to the fact that several strikes have been reported regularly.

1.8 Delimitation of the Study

The geography of Kenya is diverse, varying amongst Kenya's 47 Counties which are subdivided into 8 regional blocks (Nairobi, North Eastern, Coast, Nyana, Eastern, Central, Western and Rift Valley) selecting a county in each block. The Kenyan counties are geographical units proposed by the 2010 Kenyan Constitution as the devolved government units. The power of the counties is shown by Articles 191 and 192, and in the Kenyan Constitution fourth schedule and the County Governments Act of 2017. The counties are also single member constituencies for the election of MPs to the Kenyan senate and special parliament women members to the Kenyan National Assembly. As of 2013 general elections, there are 47 counties whose size and boundaries were founded on the 47 recognized legally Kenyan Districts.

There are many factors that might influence M&E practices and performance of CMHP however this study focuses on establishing the moderating effect of contextual and behavioral factors because they are the ones anticipated influencing the relationship between M&E practices and performance of County MHP. The study specifically focused on the CMHP in Kenya. The study determined the influence of M&E planning, stakeholder engagement, capacity building for M&E, M&E data use moderating influence of contextual and behavioral factors on performance of maternal health programmes in Kenyan County Governments. The study targeted eight regional blocks in Kenya where a county was chosen by use of a simple random sampling. The study population was 1165 respondents including staff from level 4 and 5 hospitals (Nurses, Clinical officers, Medical officers, Nutritionists, Pharmacists, Health Records, Laboratory technologists, Counsellors, Medical superintendents, Hospital administrators, Nursing services managers and MCH in charge), County Health Management Team members, County governors/deputy governor, County Executive Members for Health, Health County Chief Officers, County delivery unit members and Maternal health NGOs. These were selected since they were able to give relevant information on County Maternal Health Programmes in Kenya.

1.9 Definition of Significant Terms Used in the Study

Behavioural determinants: These are factors that define how people conduct themselves and might be due to personality, exposure, the situation, or are a reaction to the environment and are influenced by culture, genetics, attitudes, coercion, persuasion, emotions, hypnosis, values, rapport, ethics and authority.

Budgetary Allocation: The amount of money put aside for a particular activity. It is the amount of money set aside for specific tasks in this study.

Capacity building for M&E: Training, adoption of collaborative methodologies, and an emphasis on material used to train workers in the health sector to enable them to perform their duties efficiently, effectively, and sustainably. These efforts are aimed at empowering or assisting persons working on projects that require monitoring and evaluation expertise.

Contextual determinants: These are characteristics of the organization that are related to the effectiveness of the M&E process of maternal programmes.

Organizational characteristics include but not limited to the physical and the structural settings (resources available), organizational culture, support, rewards, structure and strategy that influence the M&E process and the social context (political atmosphere).

Data management for M&E: This is a regulated method of gathering, storing, and analyzing data with the goal of ensuring that it is suitable for M&E purposes. It considers the use and demand for data in decision-making and review, as well as the relevance, frequency, and quality of data, and the use of suitable data collection techniques while following to guidelines and professionalism in data collection.

Monitoring and evaluation: This means to a set of techniques used in M&E, including as planning, capacity building, data use, research, and surveillance, with the goal of improving project procedures and outcomes..

Performance of maternal health programmes: This includes the real project output or results as assessed against its envisioned outputs (or goals and objectives). There is no single set of measures that may be applied across all projects but generally revolves around timeliness, scope, cost and client satisfaction.

Planning for M&E is a systematic and objective procedure for monitoring project performance through the design and planning of data feedback systems, the implementation of agreed-upon strategies, and the establishment of indicators through collaboration among various stakeholders involved in Management Projects.

Stakeholder engagement for M&E: This entails involvement of all the parties that are key to the implementation of the M&E process which comprises of their identification, analysis and coordination during the process.

Maternal health: This relates to a woman's health throughout her pregnancy, childbirth, and postpartum period. While motherhood is typically a wonderful and fulfilling experience, it is often associated with hardship, illness, and even death for far too many women.

Performance of maternal health: This refers to accomplishment of maternal programmes goals and objectives which ensures health of women during pregnancy, childbirth and the postpartum period.

1.10 Organization of the Study

The study is structured into five chapters. Chapter One gives an overview of the study and contains: the background of the study; the variables of the study and the statement of the problem; purpose of the study; research questions, research hypotheses significance and assumptions of the study; delimitation and limitation of the study; and definition of significant terms used in this study. Chapter Two contains literature review on concepts and themes formulated and identified from the study objectives; the theoretical framework; and conceptual framework. Chapter Three presents a comprehensive description of the research methodology that includes the philosophy adopted for the research and the research strategy. Chapter Four presents data analysis, presentation, interpretation of results of the study that include data analysis based on themes generated from study objectives and hypotheses. Chapter Five presents the summary of the findings; discussions of the finding, conclusions, recommendations and suggestions for further research based on the findings of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature related to the study based on the following thematic areas: M&E practices and performance of county MHP, performance of CMHP, planning for M&E and performance of county MHP, stakeholder engagement and performance of CMHP, capacity building for M&E and performance of CMHP, data management for M&E and performance of county MHP, contextual determinants and performance of CMHP, behavioral determinants and performance of CMHP, theoretical review, conceptual framework, summary of the literature review and knowledge gaps.

2.2 Theoretical Framework

This study was anchored on the program theory, contingency theory, stewardship theory principal agent theory and the theory of constraints.

2.2.1 Program Theory

This theory was established by Bickman et al. (2018) which consists of a number of proclamations that describe a definite program, describe why, how, and under what circumstances program affect takes place, predict program results, and determine the requirements needed to attain optimum program results (Seith & Philippines, 2017). For a long time, the program hypothesis has been used to manage evaluation; it illustrates the program's ability to solve an issue by attending to the requirements in the need appraisal. It also provides instruments for determining assessment effect zones.

This Theory manages an assessment by distinguishing key program elements and articulating how these components are relied upon to determine with one another (Donaldson & Lipsey, 2014). Information accumulation designs are then made inside the structure so as to gauge the degree and nature of every element event. When grouped, the data is dissected inside the structure. To begin, information on a similar program component that has been obtained using diverse methodologies or from various sources is triangulated. Stake (2016) proposed a way for depicting the program's anticipated predecessors (what should happen before it goes live),

exchanges (exercises and yields), and consequences. The present work data is compared to what was expected and what the benchmarks for that program are. Weiss (1972) proposed using way outlines to depict the groups of ventures between a project's involvement and the ideal results, which was another early advocate notion. This type of uncomplicated model allows the evaluator to identify the variable to include in the evaluation, locate the point in the chain of events where the succession splits, and be open to changes in program usage that may impact the model's example.

In today's evaluation practice, a program hypothesis is defined as the creation of a plausible and acceptable model of how a program should operate (Pilcher et al., 2017) or a set of recommendations on what goes on operating at a profit box during the change on contribution to yield, that is, how a bad situation is changed into a better one through treatment input. It is likewise taken a gander at as the procedure through which program segments are dared to influence results. According to Rossi (2017), the authoritative arrangement that governs how to collect, construct, and distribute assets, as well as how to sort out program operations in order to create and sustain the planned administrative framework, is known as the program hypothesis. The hypothesis also oversees the administration use strategy, which evaluates how the project's benefit conveyance framework communicates with the estimated target population to deliver the anticipated mediation. Finally, it evaluates how the proposed action for the chosen target population maximizes social benefits (impacts). According to Patton (2015), advantages of the hypothesis-based structure to observation and assessment include the ability to attribute venture results to specific undertakings or exercises and the ability to discern unforeseen and unwanted program or task effects. Hypothesis-based assessments enable the evaluator to explain why and how the program is working in this way.

Checking and assessment are personally connected venture the executives capacities and thus there is a ton perplexity in attempting to make them deal with tasks (Crawford & Bryce, 2016). Checking and Evaluation are unmistakable however integral. Accordingly, this hypothesis assumed a few critical jobs in assessment practice. This theory thus was relevant to the study in relation to use of monitoring and evaluation findings, Technical data management and monitoring implementation strategy.

2.2.2 Contingency Theory

In his seminal 1964 article, *A Contingency Model of Leadership Effectiveness*, Austrian psychologist Fred Edward Fiedler proposed the contingency theory of leadership. The concept of environmental dynamism is supported by contingency theory (Lawrence & Lorsch, 1967). During his studies on leader effectiveness in group situations, he discovered that one's ability to lead was dependent on their control of the situation and leadership style. The contingency theory asserts that the context in which an organization operates determines the optimum method for it to organize. Dess and Beard (1984) argued that environmental dynamism deals with absence of pattern and unpredictability, which distinguish between rate of change and the unpredictability of environmental change. Porters (1980) five forces model of industrial economics provided the dimensions for threats of new entrants, competition among rivals, exit barriers, relative power of buyers and suppliers of the firm.

Environmental dynamism was defined by Eisenhardt and Martin (2020) in terms of either moderately dynamic markets or high velocity markets. They contended that reasonably unique markets are ones in which change happens as often as possible however pursue unsurprising and direct ways. Conversely, they contended, when markets are exceptionally unique changes turned out to be nonlinear and less unsurprising. The Contingency hypothesis isn't concerned with having the pioneer adapt to a situation; rather, the goal is to match the pioneer's style with a favorable situation. To make best utilization of this hypothesis, it is imperative to discover what style a pioneer has (Gupta, 2016). Authoritarian behavior can be used to survey, supervise, and anticipate employee behavior so that organizations can more likely see how to propel people. There are situational factors that can influence the investigation of authoritative behavior and its expectations of worker behavior. According to the contingency theory, there are specific situational factors that can affect the direct relationships between independent and dependent variables in the study of organizational behavior.

2.2.3 Stewardship Theory

Stewardship theory as espoused by Davis, Schoorman and Donaldson (1997) states that managers are not motivated by personal goals; rather, they are stewards whose motivations are aligned with the goals of their superiors. The theory expect that long

haul legally binding relations are created dependent on trust, notoriety, aggregate objectives, and contribution where arrangement is a result that outcomes from social correspondence.

As per this hypothesis, a steward places more prominent incentive on group as opposed to singular objectives, settles on choices that are esteemed to be to the greatest advantage of the main, and perspectives the triumphs of the association or contract as achievement and motivating force for accomplishing objective arrangement, without prompt money related advantage or individual satisfaction (Davis, Donaldson & Schoorman, 1997). The hypothesis further expresses that stewards are propelled by inborn prizes, for example, trust, reputational improvement, correspondence, attentiveness and independence, dimension of duty, work fulfillment, solidness and residency, and mission arrangement.

Stewardship hypothesis depends altogether on the important's and steward's underlying trust attitude. Van Slyke et al. (2019) who distinguish, trust as the eagerness and danger of being defenseless, with respect to both the steward and the vital, to the likelihood that one performing artist in the agreement may seek after his/her very own personal responsibility to the avoidance of the on the whole tons of the agreement. Basically, a steward places more prominent incentive on participation, notwithstanding when his/her objectives are not flawlessly lined up with the important. Davis, Donaldson, and Schoorman (1997) are of the view this is a direct result of the stewards observation that profits by authoritatively adjusted conduct is higher than advantages that can be increased through individualistic and self-serving practices, to the detriment of the chief's objectives. This hypothesis is applicable to this investigation since province governments go about as stewards of medicinal services devolution and hence for it to work to help maternal social insurance, there is requirement for good relations between the area government and the Principal who is the national government and that their objectives ought to be adjusted. District governments have an agreement with the general population of Kenya who incorporate ladies, and through sacred methods they were chosen into office to serve and be stewards of their kin's prosperity.

The shortcoming innate in this hypothesis is that it doesn't take a gander at the capacity of various nations to receive a stewardship show since every nation has

distinctive verifiable and social settings just like the case in Kenya. The hypothesis as indicated by Davis et al. (1997) might be hard to bring into authoritative foundation, since effective acquaintance requires duty with the new procedure by every influenced performer. Another shortcoming is the danger of state officers getting weight from their bosses in government who are solely intrigued by monetary effectiveness. Despite the fact that a valuable hypothesis, it has not been utilized in the investigation on account of the shortcomings.

This hypothesis is appropriate to this investigation since province governments go about as stewards. Stewardship is a potential method of administration in the wellbeing arrangement results by concentrating on regulating, morally situated desires for stewardship. The hypothesis likewise offers the possibility of reestablishing the feeling of social reason among open segment heads and reestablishing a feeling of trust and authenticity to the job of the state. It is contended that if all around built up, the idea of stewardship is steady with proof based wellbeing approach structure. The hypothesis has establishing in morals and financial matters and consequently can demonstrate what estimates function admirably to enhance generally wellbeing status.

2.2.4 The Principal Agent Theory

Principal Agent Theory was developed by Bossert (1998). The Principal Agent Approach as advocated by Bossert may be referred to as the Decision Space Approach. While the main operator approach takes a gander at decentralization with regards to the goals of the key and how the essential uses different systems of control to guarantee that specialists progress in the direction of accomplishing those destinations. According to Bossert, decentralization necessitates additional ideas to capture the expanding scope of watchfulness or decision permitted to operators during the time spent decentralization which separates decentralized main specialist connections from brought together relationship, this idea is known as decision space (Bossert, 1998). The hypothesis takes a gander at different capacities and exercises over which neighborhood experts will have expanded decision. It sees choices in chose useful zones. As per the hypothesis, choices in these territories are probably going to influence the frameworks execution in accomplishing the targets of value, proficiency, quality and money related soundness. For this situation, choices made

with respect to utilitarian territories could influence conveyance care either emphatically or contrarily.

First component is the HR work. Administrators ought to be offered space to contract and fire in order to build effectiveness and nature of administration. However, there is a need for a cautious methodology because this power can be misused if not properly managed. At the moment, area governments are in charge of hiring and firing employees based on national models approved by an Act of Parliament. Every province has an open administration that enrolls its local officials (wellbeing laborers) and attempts disciplinary measures.

Second component is data and checking capacity. Bossert underscores the significant job of data and checking to the principals as they assess how and whether the specialists are accomplishing the principals' destinations. He likewise recognizes that the specialist's control of data is urgent to the arranging intensity of the operator opposite the foremost, calling attention to that focal services require routine data frameworks through which their operators must report. For instance, the National Health Management Information System (named AfyaInfo) that is composed at national and area levels is a decent activity. Bolstered by USAID, the main stage that involved building district wellbeing data arrange (CHIN), to address issues of the wellbeing part has been finished. It started with four wellbeing offices for every district and plans to grow to six in the second stage. The system joins wellbeing offices and area bureau of wellbeing through web network and accordingly guarantees correspondence, information sharing and data sharing inside the whole province wellbeing framework (USAID, 2018). It is imperative for region governments to have significant wellbeing information that will help in accomplishing wellbeing devolution destinations on conveyance care.

The third component is the fund work. The significance of choice space in settling on budgetary choices, he contends that key choices on wellsprings of income and allotment of consumption are probably going to have huge effect on value and money related soundness, in spite of the fact that he recognizes that some portion choices about the hierarchical structure of administrations are likewise liable to importantly affect proficiency, quality and value (Bossert, 1998). The present circumstance in Kenya is with the end goal that provinces are required to back wellbeing

administration arrangement for essential and optional consideration from their square concedes distribution. Access to openly give administrations, for example, free maternity care will rely upon spending designations at province level (KDHS, 2016). This implies areas that esteem maternity administrations; especially labor administrations will build assignments for same.

The fourth component is the administration work. The choice space approach focuses on the significance of administration leads in impacting the job nearby political on-screen characters, recipients and suppliers can play in settling on neighborhood choices. These principles structure neighborhood cooperation in a decentralized framework. The WHO (2017) bolsters authority and administration as one of the wellbeing building squares. Appropriate initiative and administration in districts will guarantee maternal mortality is diminished. Regions with legitimate administration will go far to enhancing maternal wellbeing by enhancing labor administrations. One such case of good initiative is Machakos County (Waweru, 2015). In an ongoing Infotrak Limited survey, a nearby surveyor and Research Company, the district was positioned most elevated in arrangement of wellbeing administrations, having put resources into crisis administrations, for example, ambulances and fast reaction engine bicycles, this has empowered numerous ladies to achieve medical clinic in great time, hence sparing lives.

The hypothesis as upheld by Bossert isn't without shortcoming. One such shortcoming is that the hypothesis does not contact the issue of administration as far as political setup. The political setup in various nations varies and Kenya's political structure is one of a kind and its effect on lapsed social insurance should be researched. Second, it doesn't discuss benefit conveyance work that relies on offices and therapeutic supplies, an imperative variable in this investigation. In spite of this shortcoming, the hypothesis was viewed as dynamic as in it is worried about issues that issue, for example, value, proficiency, quality and budgetary soundness. It was valuable since it enormously revealed different issues featured in the examination and help determine how capacity building for M&E influence performance of Health Programmes in Kenya.

2.2.5 Theory of Constraints (TOC)

The Theory of Constraints was developed by Goldratt (1984) which is a project management philosophy that states that the strength of any chain, either a process or a system, is only as good as its weakest link. It assists organizations in achieving their goals by providing a mechanism to gain better control of their initiatives. TOC is a systemic way to identify constraints that hinder system's success and to effect the changes to remove them. TOC consists of separate, but interrelated concepts such as performance measurement processes, logical thinking processes, and logistics. The logical thinking process of TOC gives us a series of steps that combine cause-effect, experience, and intuition to gain knowledge.

The theory, in this case, addresses dependent variable, project performance. For any project to perform there is a need to minimize the constraints that can otherwise reduce the quality and quantity of the product and services delivered. These constraints may include poor management practices such as cost overruns caused by poor budgeting and corruption. The theory points out the need for project management to identify project constraints that can limit the performance of the project and tries to give direct approaches on how to solve the constraints. This study augured its discussion on this theory since it checks on issues that can limit project performance.

2.3 Performance of Maternal Health Programmes

In low- and middle-income countries, the performance of health programs remains a key concern (LMICs). In 2015, an estimated 303,000 women and young girls died as a result of pregnancy and delivery problems, with LMICs accounting for 99 percent of these deaths. Reduced avoidable mortality and improved maternal health services require access to the availability of professional health care workers (HCWs) along the maternal care continuum (antenatal, delivery, and postnatal). While training, task shifting, and retention initiatives have shown potential in increasing the availability of health workers in low-resource areas, there are worries that health workers' performance remains inadequate. This has also been connected to a lack of adequate training and supervision, as well as the know-do gap, or the inability to put newly learned knowledge and abilities into practice. As a result, while health workers may have been trained to complete assigned tasks, they may underperform due to a variety of factors such as the environment, clients, or providers (Okungu, 2019). This poses a

huge challenge in terms of effectively decentralizing health services to primary and secondary levels of care while maintaining high-quality treatment.

Inauguration of free MCH programmes in 6 2007, the government was faced with great hostility politically from the opposition; who saw the move as a scheme that was aimed at enticing voters to have the then president reelected into presidency for the second term. This resistance was hence great to the point that including the then Minister for Health had joined the opposition in political ideologies (GOK, 2016) Politics has only been a small factor in determining and giving the direction for MCH programmes implementation in the country. The giant factor for influence has been availability of financial resources. The Kenyan budget has been constrained between development programmes, education and repayment of debts. In his Speech of 2009/2010, the then minister for finance-read a budget that allocated less for medical facilities compared to infrastructural development and other sectors of the economy. This has left almost 41% of the MCH units across the country constrained with budgets, meaning that the programmes lack proper medicine and equipment and they cannot hire experienced experts.

A healthy population is necessary for increased production and long-term prosperity of a country. According to the study, the county health board has made significant progress, particularly in the areas of communicable diseases (tuberculosis, HIV/AIDS, and malaria) and child mortality, through the implementation of various MCH programmes across the county. A report by the KDHS (2016) from Kilifi County shows that Under Age 1year and Under Age 5year are 42, 640 against 1,339,775 in Kenya and 197,364 against 6,518,230 respectively. This has left a gap in the central tendencies deviation from the required average in the number of survivals in Kenya between ages 1 to 5 years as the deviation is too big in the county from the country, leaving one wondering what could be the problem. A research done by the WHO (2015), shows that Kilifi County has been disadvantaged by over 67% in its quest of implementing the MCH programmes that could see the children and mothers of the county survive.

Information and communication technologies (ICTs) such as mobile health technology are increasingly advocated as a way to bridge the know-do gap and, as a result, improve the performance of health workers and the quality of maternal health.

Mobile health (mHealth) is described as medical and public health practices that are supported by mobile technologies such as phones, patient monitoring devices, personal digital assistants (PDAs), and other wireless devices. These technologies are currently advancing at a faster rate than other forms of infrastructure, broadening the scope of mHealth programs that target health workers as users. It has also been used to promote referral connections, point-of-care services, health promotion, and behavior change for mother and child health, according to research reviews. Actors, health systems, and the specific intervention contexts all interact with technology (Maina, Wanjala, Soti, Kipruto, Droti & Boerma, 2017). As a result, providing health-supported maternity care with the expectation of optimal health worker performance is a challenging task.

2.4 Monitoring and Evaluation and Performance of MHP

Monitoring and evaluation in this study were measured using M&E planning, stakeholder engagement, capacity building for M&E, M&E data use. A monitoring and evaluation plan incorporate several accepted best practices M&E system. Scheirer (2017) defines practices as a collection of actions such as planning and coordination, capacity building, surveillance, and data demand that can help project decision-making and learning. M&E methods guarantee that project results can be quantified at the impact, outcome, output, process, and input levels, providing a framework for accountability and assisting in coming up with informed program and policy decisions. Monitoring and evaluation, according to Ober (2017), are an important part of design programs because they ensure logical reporting; the process that connects result and demonstration accountability, quantifies efficiency and effectiveness, ensures effective resource distribution, stimulates continuous learning, and improves decision making.

Monitoring and evaluation procedures help project management to incorporate critical components of a project, such as cost, time, and human resource consequences. They are critical for successful projects and should not be disregarded at the start (Khan, 2016). As a result, it's critical that management and donor agencies understand and are committed to implementing the recommendations resulting from monitoring and evaluation (Ndungu, Gakuu & Kidombo, 2019). It is critical that project implementers understand the procedures and thought processes that are based on monitoring and assessment techniques. It's also critical that the project's implementers assume

responsibility for the procedures in use, are committed to them, and feel obligated to persuade other stakeholders of their support and long-term benefits.

Building monitoring and evaluation techniques in health programs can help address issues such as insufficient capacity-building programs and weak accountability systems. Donors in Sri Lanka assure accountability through increasing local demand for assessment with an emphasis on utilization and addressing issues of skills, procedures, methodology, and data systems rather than relying on government systems (Velayuthan, 2015). The following are some of the current challenges to M&E in Southern Asia: a lack of ways to examine skill gaps between staff working in the M&E field, with experts presently hired on basis of basis; incompetence between staff and firms; unavailability staff; absence of quality assessments; and incompetence among organizations and personnel (Santosh, 2017). In addition, there is a lack of effective verification of monitored data, which leads to a reliance on survey-based data and poor data analysis within line ministries.

For an M&E system to be effective it is good practice that some planning should go into it. This assertion is supported by Velayuthan (2015) who observes that an M&E plan that is adequately documented encourages project stakeholders what to do in terms of M&E activities before implementation of a project begins. Therefore, details of how M&E will work within a project should be written up at the earliest possible time. There is need to provide greater detail which should be captured in an M&E plan. For M&E practice to enhance tracking project accountability there is need to feed project information into it so as to help in tracking of project progress. This view supports that from Santosh (2017) that avers that Monitoring information should be fed into the project monitoring and evaluation process to build up data bank that can be used to improve the selection and design of future projects besides improving the project, in line with this observation the study sought to investigate in M&E information was fed into the M&E process to track project transaction and enhancing improvements.

M&E Practice is vital during the stages of project implementation, management as well acting as a tool for project sustainability. This agrees well with that of Khan (2016) who avers that M&E practices has to be at the centre of project implementation if has to improve performance, in light of M&E methods, evaluation

has shifted from studying input and output, as well as the causal mechanisms that link them, to assessing outcome, impact, and/or long-term results (Ocharo, Rambo & Ojwang, 2020). Therefore, it is imperative that developmental practitioners embrace M&E practices in all facets of project cycle so as to ensure better performance as well as sustainability.

The fundamental challenge for monitoring and evaluation in Africa is that promoting openness and, indeed, surveillance is at the heart of opposing political hegemonies, which runs against to the theory of social change's advocate of inclusivity. It is possible that the freedom to present discoveries in the public domain could be limited or completely forbidden (Naidoo, 2018). This has the effect of weakening surveillance, which is an important component of monitoring and evaluation. Such methods have a significant impact on the relationship between monitoring and evaluation and project success and long-term viability. For measurement and data, Benin's monitoring and evaluation approach depends on the national statistics structure. It has challenges such as a lack of data updating capability, limited accessibility to data to be obtained and sort out, and data gathering limits.

Monitoring and evaluation in Health Programs done by government agencies with no prior confirmation and validation could produce outcomes that do not have credibility, in contrast to the theory of change, which supports for scrutiny for quality in execution to assist differentiate amid execution and theory failures. Burundi's Vision 2025 development framework includes monitoring and evaluation, with the emergence of better practices in the field of restricted monitoring and the creation of collaborations between different institutional structures in the country's administration. Although project and program-based monitoring and evaluation have existed in Kenya since the 1980s, ability and infrastructure constraints persist in the course of project execution (John & Khilesh, 2018). Kenya's 2010 Constitution brought about M&E advanced governance systems, which offers an chance to strengthen the nation's M&E practices while also posing a threat to its continued existence, particularly in terms of devolved units' flaccid accountability mechanisms.

Uganda's M&E is inextricably linked to the requirement to validate government outcomes in Health Programs and receptivity to citizen demands as indicators of good governance. In Uganda, M&E is carried out by a section within the Prime Minister's

Office (OPM), with little but expanding arm of assess practice by civil society, comprising NGOs nationally and internationally working alongside the government. Small demands for M&E goods to guide decision-making, as well as developing a culture of managers who use M&E data to enhance performance, are both challenges (Sugut & Rambo, 2017). The incentive framework for public service monitoring and evaluation techniques is also still lacking (Crawford & Bryce, 2016). Poor information distribution and the institution's incapacity to establish capacity for timely generation and transmission of information are blamed for the limited utilization.

Monitoring and evaluation techniques in health programs must be implemented effectively, which necessitates consideration of practical difficulties from the start. The government and donors should keep a careful eye on the project through agreed-upon planning and control methods. The M&E Programme Plan may need to be fleshed out and reflected in the Project Implementation Plan or Manual (PIP/PIM), with provisions for annual or more regular updates as needed (Reuben & Arévalo, 2015). It's important to remember that project executers pay attention to projects during the eecution cycle rather than at the start of the project's ideation stage.

2.5 Planning for M&E and Performance of MHP

In this research, M&E planning was assessed using budgeting, resource mobilization & allocation, M&E frameworks, M&E work plans, M&E policy and strategic in support of M&E. In evaluation, planning is crucial. It is a product of organizational management, and it improves decision-making and policymaking, and showing where technical support and training are needed (UNDP, 2017). One of the numerous obstacles in the World Bank project design and preparation has been insufficient planning and coordination for data collecting and usage (Oluoch, Rambo & Ganesh, 2020). This difficulty has hampered project implementation, administration, and sustainability, and the incorporation of M&E.

Many various aspects determine the success of a plan, according to UNDP (2018). In community-based projects, monitoring and evaluation also focuses on the structures or procedures in place for coordination and control. To ensure efficiency and effectiveness in community-based project M&E, the necessary criteria must be recognized and addressed. According to Spinner (2018), some firms do not devote adequate time and effort to project planning and controlAs part of the coordination

process, project planning ought to specify when and how frequently information would be obtained, and who has the duty of preparing and distributing reports to the firm, beneficiaries, and donors. Furthermore, authentication and verification procedures must be implemented to ensure long-term viability.

According to a survey of 11 nations, planning is fragmented, with an emphasis on technical and methodological difficulties at the expense of policy and other institutional issues (CLEAR, 2017). When it comes to M&E planning, there are no processes in place to ensure that earlier outcomes and reports are consulted when developing solutions to current problems. Coordination is hampered in such situations. Monitoring and evaluation actions that are carried out in a collaborative manner improve experiences, sharing, and cohesion (Khan, 2016). All of this is required in order to improve sustainable realization. The monitoring and evaluation system should also be inspected, reviewed, and enhanced on a regular basis. The capacity to describe issues while working with stakeholders ensures that project objectives are clearly stated, understood, and supported by all parties involved. Everything is in order thanks to this arrangement. The purpose of monitoring and evaluation is to increase the participation of primary stakeholders as active participants, and planning and coordination are essential to accomplishing this goal. They ought to partake in interventions and given the lead in tracking and analyzing progress toward mutually agreed-upon outcomes and making decisions on corrective actions.

While opinions on the purpose and function of M&E planning differ, its importance in the project cycle and in the long-term sustainability of various organizations is undeniable. Monitoring and evaluation are at the heart of IFAD's approach to managing for effect, which includes the need to respond to changing conditions and get a better understanding of the situation, as well as managing adaptively so that the project's desired outcomes are more likely to be realized (Taut, 2017). A well-designed M&E planning and coordination system gives information on a project's progress and shows if it is accomplishing its goals. This information may reveal where improvements to the project are needed in light of changing circumstances in the local environment.

An experimental study on using negotiated budgets for planning and performance evaluation was done by Arnold and Gillenkirch (2015). The study discovered that

using budgets for both planning and performance evaluation improves the subordinate's budget recommendations during the negotiating process as well as his performance afterward. When the superior is limited to a single budget rather than distinct budgets for planning and performance evaluation, these impacts are magnified, especially when it comes to subordinate performance. In our study, the benefits of enhanced subordinate cooperation outweighed the loss of flexibility caused by the superior's adherence to a single budget. The findings of this study contribute to a better understanding of the interdependencies between competing budgeting goals and help to explain why businesses frequently employ a single budget for several objectives. The general figures for negotiated budgeting might be determined by top management. Operational managers, in contrast to top-down budgeting, are given the ability to negotiate these statistics. However, budget administrators are often viewed by other members of their organizations as bean-counters, folks who only care about the numbers. This is different from the current study which focuses on County Maternal Health programmes.

In a study of projects in Kiambu County, Kenya, Wabwoba and Wakhungu (2016) recommended that group members be actively involved in monitoring and evaluation planning and implementation for programs to promote ownership and sustainability. A purposive sample strategy was utilized to choose key informants from stakeholder organizations and project groups using an evaluative study methodology. Face-to-face interviews with ten key informants (community-based organizations, faith-based organizations, financial institutions, and the Kenyan government) and focus group discussions with twenty groups (ten women's groups, four men's groups, and six mixed groups) that benefited from the funded projects were used to collect data. The chi-square test was used to assess the data at the 95 percent confidence interval level. The findings demonstrated that group members' participation, rainfall patterns, leadership, management, and financing levels all had an impact on the long-term viability of community food security projects. The study differs from the current one in that it used an evaluative research approach and selected key informants from stakeholder organizations and project groups using a purposive sample strategy. Furthermore, project ownership is crucial, since antecedent failure can jeopardize the project's long-term viability. Planning for monitoring and evaluation improves understanding of how County Maternal Health works.

Budgetary allocation was the most important determinant in project success according to Mugo and Oleche (2015). They discovered that budgetary allocation was very important to the undertaking because it had a large robust coefficient of 0.656939 at a Z statistic of 4.92, as well as a high marginal effect of 0.1312997 at a Z statistic of 5.44, in their study on the impact of M&E on projects using the Probit Model. They came to the conclusion that allocating a budget for activity monitoring and evaluation was a favorable factor of M&E implementation in projects. If all other variables are maintained constant, an increase in the amount of budget allocated to M&E in a project is highly likely to improve the likelihood of monitoring and evaluation execution by up to 13.13 percent. Even though the study focused on budgetary allocation to play a key role in project success, the study is still different from the current study. Budgetary allocations are determined to be essential components of every organization's annual financial plan, or budget. They show how much money an organization is willing to put into a department or program. Without allocation limitations, spending can outpace revenue, resulting in a financial shortage. This is different from establishing moderating influence of contextual and behavioral determinants on the relationship between M&E practices and performance of Health Programmes in Kenya.

Moreover, negotiated budgets for planning and performance evaluation were used in an experiment to answer two outstanding questions about these findings by Arnold and Gillenkirch (2015). The study investigated how a conflicting planning task and a performance evaluation task effect budget negotiation behavior and outcomes. In addition, the study looked at whether a single budget could be used more effectively for both purposes than two separate budgets. The goal of this study is to construct a hypothesis that predicts that introducing a planning work that competes with the superior's performance evaluation task will boost subordinate collaboration during and after the negotiation of a performance evaluation budget. Furthermore, the study anticipated that when the superior is limited to using a single budget for both goals, subordinate collaboration will improve much more. The findings mostly corroborate our hypotheses. The study discovered that using budgets for both planning and performance evaluation improves the subordinate's budget recommendations during the negotiation process as well as his performance following the negotiation. When the superior is limited to a single budget rather than distinct budgets for planning and

performance evaluation, these impacts are magnified, especially when it comes to subordinate performance. In our study, the benefits of enhanced subordinate cooperation outweighed the loss of flexibility caused by the superior's adherence to a single budget. The findings of this study contribute to a better understanding of the interdependencies between competing budgeting goals and help to explain why businesses frequently employ a single budget for several objectives.

Malaria surveillance and the use of evidence in planning and decision-making in Tanzania's Kilosa area was studied by Mboera, Rumisha, Mlacha, Mayala, Bwana, and Shayo (2017). During October 2012, health facility personnel and members of the district health management team participated in a study in Kilosa District in central Tanzania. A standardized questionnaire and check list were used to assess the existing malaria information system. Direct observations of reporting and processing, as well as evaluation of report forms and reports of processed data, were all part of the data gathering process. Three district authorities and 17 employees from public and private health care facilities were questioned. The disease surveillance functions were familiar to 15 of the 17 informants. During the previous two years, a large number (47 percent, 8/17) obtained disease surveillance training. The major modes of reporting epidemiological data from facility to district level were public transportation and motorcycles. Due to a lack of resources and response from the district authority, the majority of the health facilities (93 percent, 14/15) had difficulty submitting reports. Malaria data analysis was reported in 52.9 percent (9/17) of facilities, but only for malaria incidence by age groups. Data analysis problems included a shortage of compilation books, a lack of computers, poor data storage, incomplete recording, a lack of adequate data analysis capabilities, and an increase in workloads. Drug requirements were mostly quantified and forecasted using data from both facilities and districts. Contextual and behavioral characteristics have a moderating effect on the relationship between monitoring and evaluation techniques and health program performance in Kenya.

The study examined monitoring and evaluation routine at United Nations Environment Program Global Environment Facility Projects in Kenya and its effect on Project Performance stated by Kihuha (2018). The research enrolled the entire population of UNEP GEF project staffs to respond to an in depth individual interview questionnaire. The study population had 15 project managers, 32 support staff, 5 monitoring, and

evaluation staffs. The analysis of data was done by utilising computerized statistical package of social scientists (SPSS) and summarized in tables for interpretation and inference. M&E practices were analysed at four levels of planning process, technical expertise, stakeholder involvement and management participation. The study established adaptability of planning process and technical expertise on allocation of funds for M&E, development of clear M&E plans/tools, regular collection and analysis of M&E information, training of M&E staffs and attracting skilled M&E staffs with average flexibility on M&E needs assessment. The project though reported low staff awareness on M&E planning process, lack of control mechanisms to keep track of project progress, lack of utilization of M&E to support decision making during project implementation, lack of developed comprehensive strategic operational plans for regular monitoring and evaluation.

2.6 Stakeholders Engagement in M&E and Performance of Maternal Health Programmes

In this research, stakeholders' engagement in M&E was assessed using advocacy to promote M&E, stakeholder identification & analysis, stakeholder communication, collaborations and community participation. The idea of partners' cooperation being developed activities has advanced after some time. Its underlying foundations can be followed back to network and mainstream cooperation advanced mostly by non-administrative associations (NGOs) during the 1960s. In the late 1980s multilateral offices, for example Organizational Labor Organization (ILO) started to advance partner cooperation being developed tasks and projects. The restricted accomplishment of numerous improvement activities was credited to inability to include individuals in the reception of Monitoring and assessment frameworks for undertaking the board (World Bank, 2017). Continued partner support in observing and assessment can't be accepted - it must be standardized.

The wide overview on the accomplice approach conveyed that Corporate Social Responsibility (CSR) and accomplice interest supplement each other. As per this, Hillman (2018) saw that a firm has relationship with constituent accomplices gathering and the methodology and results related with these associations depend upon the interest. The interests of the extensive number of accomplices have regard and point of convergence of accomplice speculation is on managerial decisions making

Kakabadse *et al.* (2015), thusly, surmised that chairmen should concentrate on accomplices. Checking and evaluation structures have been in nearness since the old events, in any case today, the necessities for M&E systems as an organization device to show execution has created with enthusiasm by accomplices for obligation and straightforwardness through the use of the watching and appraisal by NGOs and diverse establishments, including the organization. Improvement banks and individual guide associations moreover reliably apply M&E to measure progression ampleness similarly as estimation for straightforwardness.

The ideal condition is the relationship of all accomplices including the givers, system, beneficiaries and people in the masterminding and utilization of the endeavor in all periods of watching and appraisal all through the term of the undertaking. In gathering and facilitated exertion with all these, they make sense of what is to be checked and evaluated, how watching and appraisal is to happen including ID of markers, they do the examination of the data and overview the execution of the endeavor and moreover offer heading on the most capable strategy to proceed with the endeavor (Bradle, *et al.*, 2017). Watching and Evaluation should be Integral portions of the endeavor the board cycle including adventure masterminding and plan. As indicated by PASSIA (2018), the reasoning regarding checking and assessment at the structure arrange encourages the undertaking partners to think as far as execution estimation even before usage begins with an unmistakable picture of desires for what an effective venture would resemble. As a rule, more gatherings is disillusioned, as not all desires may progress toward becoming reality and partners may make over the top desires. This will likewise be the situation checking the venture under time-weight or without partners; subsequently gatherings may feel passed-on and de-inspired. Partner association may likewise wind up ensnared when the view and conclusion of partner changes after some time when multifaceted nature increments and knowledge may diminish.

Accomplices should be related with perceiving the endeavor, the goals and targets and recognizing evidence of markers that will be used in watching and evaluation. The accomplices are also drawn in with get-together and examination of the data and getting the activities (World Bank, 2014). The activity of the administrators of the endeavors is to empower the watching and evaluation process. The ideal way is the relationship of all accomplices including the suppliers, system, beneficiaries and people drew in with the organizing and execution of the endeavor in all periods of

watching and evaluation all through the range of the undertaking (Bradle *et al.*, 2017). In meeting and participation with all these, they make sense of what is to be checked and surveyed, how watching and appraisal is to happen including recognizing evidence of markers, they do the examination of the data and assess the execution of the endeavor and have the ability to make course on the most capable technique to proceed with the endeavor.

Partner's inclusion builds the authenticity of the basic leadership procedure and fortification of popularity-based practices (NEA, 2014). The venture group should likewise give careful consideration to the recognizable proof and effect appraisal of activities choices made by partners outside their impact expert. Task observing comprise of the accumulation and understanding of information and revealing data in connection to the venture designs, arranging and necessities, close coordinated effort with the accomplices is required. Lock (2019) saw that early commitment of accomplices in the gathering of monitoring and appraisal systems may in like manner speak to a couple of disadvantages. The sponsorship off of the essential initiative development is consistently referenced which may turn out costly and incredibly undesired for in the current money related situation. As the range and nature of accomplices in the endeavor watching and appraisal will contrast, the fitting strategies and significance of dealing with the social events should be properly assessed; putting productive vitality in insignificant accomplices is money down the channel. An extended number of accomplices will mean more effect, so critical game plan is required. Nonattendance of space for key endeavor accomplices to be related with the gathering of the monitoring and evaluation structures leaves results and impacts to be assessed by experts who have no close to home stake in the accomplishment of the endeavor other than for offering an explanation to senior heads or even supporters. In his studies on association of M&E for system water adventures, Allando (2015) saw that participatory undertaking checking and appraisal is one way through which distinctive accomplices and especially the fundamental accomplice can be locked in with managing the area adventures.

The point of convergence of open help is generally to grant information to, and collect commitment from, people from the open who may have an eagerness for an undertaking. The Constitution of Kenya (2010) gives subject the specifically to share in activities that have a quick bearing on their lives. This has influence in errand

execution. At the point when partners take an interest in observing and assessment, it implies that they have taken an interest in giving administration data and added to basic leadership. The choices from this are bound to be adequate and significant to most of the populace. This makes human and asset assembly for venture usage less demanding (Donaldson, 2016). Including partners in talks about the what, how, and why, of undertaking exercises is frequently engaging for them and it advances considerations and encourages significant investment by assorted partner gatherings.

The influence of the assessment process, particularly the analysis and interpretation of results, can be enhanced by involving organized beneficiaries, who are the primary partners in their own development and the best judges of their own condition (Proudlock, 2016). Notwithstanding, partners commitment should be dealt with consideration an excess of partner's contribution could prompt undue impact on the assessment, and too little could prompt evaluators commanding the procedure. Consulting with various partners takes into account execution estimation from the points of view of assorted task partners. Njuki et al. (2015) investigated the role of partners and their commitment in venture execution through Participatory monitoring and evaluation (PM&E) for Stakeholder Engagement, Project Impact Assessment, and Institutional and Community Learning and Change Enabling Rural Innovation in Africa - CIAT-Africa, Uganda. The study concluded that integrating local indicators with project-level indicators was necessary to improve the delivery of outputs, outcomes, and results. This provided a more comprehensive understanding of the project's advantages. This technique also gives indicators for gauging often difficult-to-measure outcomes like empowerment from the viewpoints of the project's communities or participants.

Participation of communities in development programs that benefit them has been shown to be critical to achieving long-term development. The premise is that by participating, participants will be able to better perceive the economic and social difficulties they face, as well as have a deeper grasp of how to develop projects that will benefit them (Benjamin, 2017). In an ideal world, stakeholders' consented participation in participation efforts would allow individuals who are interested in, or who are affected by, a decision, to have a say in the ultimate outcome. Stakeholders play an important role and interact on a variety of levels—from local to global—and their involvement and collaboration have an impact on the efficacy of a development

intervention. Stakeholder participation is critical when creating monitoring and evaluation systems, according to Wayne (2015). A multi-sectoral approach, which includes delegating some work to stakeholders, improves learning, develops ownership, and promotes transparency among the participants.

Involving stakeholders in the tool design process from the start guarantees that the project meets all the stakeholders' needs and is thus more responsive to their expectations. Stakeholder project ownership is also created and encouraged through interactive approaches (Clarke, 2018). These are critical aspects that affect the project's performance and long-term viability. Stakeholders, particularly beneficiaries, are more inclined to support the project's outcomes. Because the formulation and implementation processes demand community members' reflection and analysis of their own culture, attitudes, beliefs, and actions, the participatory method can sometimes encourage change in individual attitudes and community culture and norms (Clarke, 2018). The participatory method elucidates the necessary instruments for monitoring and evaluation, which is a capacity-building activity in and of itself.

The increased need for overall efficiency, cost effectiveness, and results necessitates active stakeholders having skills that enable them to contribute to their full potential. This strategy was crucial for empowering them as well as fostering inclusiveness and facilitating meaningful involvement by various stakeholder groups (Carlsson, 2017). Through the engagement of the intended beneficiaries, the impact evaluation process, particularly the review and analysis of findings, can be considerably improved. He stated that involving stakeholders is a vital method, and that its management should be well-formulated to avoid derailment of decision-making (Proudlock, 2016). This is because over-involving stakeholders could lead to a conflict of interest.

The importance of stakeholder participation in project success cannot be overstated. Nyandika and Ngugi (2014) conducted a study on the impact of stakeholder participation on the execution of road projects in Kenya's National Highways Authority. A descriptive research design was employed to target a population of 251 prequalified contractors and top management in the study. Thirty percent of the target population was selected using stratified random sampling. Multiple regressions were used to do the analysis. Stakeholder participation in various forums was found to have a favorable link with project performance. IT abilities were discovered to be beneficial.

Financial resources were shown to be relevant, and top management support was proven to be crucial in project performance.

Using data from 25 countries, Lopatta, Jaeschke, and Chen (2017) studied the influence of stakeholder engagement in the form of controlling shareholders on corporate social responsibility (CSR) performance. The findings suggest that state-controlled ownership has a favorable relationship with company CSR performance; whereas other types of controlling ownership have no effect on CSR performance. Further findings reveal that evidence is more prominent in countries where stakeholders are more involved. According to another research, a change in state-controlled enterprises leads to a change in CSR performance, but not the other way around. The role of state ownership in molding enterprises' corporate social responsibility performance in an international environment is highlighted in this article. Using data from 25 countries, the impact of stakeholder engagement in the form of controlling shareholders on the CSR performance of firms differs from the moderating influence of contextual and behavioral determinants on the relationship between M&E and the performance of Kenyan health programs.

An environmental performance measurement (EPM) model with four managerial performance indicators (MPIs: environmental tracking, organizational system, operational countermeasures and stakeholder relations) and two operational performance indicators (OPIs: operational countermeasures and environmental tracking) to assess measuring corporate environmental performance–stakeholder engagement (OPIs: inputs and outputs) by Bhattacharyya and Cummings (2015). Model reliability and construct validity are assessed using principal component analysis (PCA) and confirmatory factor analysis (CFA). Correlation coefficients among the six indicators were used to examine the relationship between MPIs and OPIs. The findings show that, rather than ideally a single element, there were numerous aspects to examine under an organizational framework. Due to varying geographical locations and variances between organizations from various industry sectors, no one model can be employed efficiently. Operational countermeasures and environmental tracking are less important in EPM than its organizational system and stakeholder relationships. Different from corporate environmental performance–stakeholder engagement evaluation, the moderating role of contextual and behavioral

determinants on the relationship between M&E techniques and performance of Health Programs in Kenya.

Concept, measurement, and validation of enterprise strategy: Vracheva, Judge, and Madden (2016) determined that stakeholder interaction should be incorporated into the firm's strategic architecture. The literature on corporate social responsibility has played a significant role in raising awareness of stakeholder issues; nevertheless, it does not give a systematic method for incorporating these concerns into the firm's strategic architecture. Enterprise strategy is a unified concept based on strategic considerations of both social and economic demands placed on a company. Despite its conceptual importance to strategy and societal challenges, however, this construct has yet to be experimentally validated. To expand the field's understanding of this increasingly significant stream of research, this study creates a reliable and valid measure of the enterprise strategy construct. The study systematically identified vocabulary that indicates the extent and kind of a firm's professed enterprise strategy based on computer-aided text analyses of business communications to stakeholders. The moderating role of contextual and behavioral influences on the relationship between M&E procedures and performance of Kenyan health programs is different from the idea, measurement, and validation of enterprise strategy.

A study on assessment of stakeholder participation in monitoring and evaluation of district assembly projects and programmes in the Savelugu-Nanton Municipality Assembly, Ghana was conducted by Sulemana, Musah and Simon (2018). This study adopted a case study approach. A sample of 196 people participated in the study. The study revealed that stakeholder participation in M&E of projects and programmes was high among the Municipal Planning and Co-ordinating Unit (MPCU) members and the District Assembly members but low at the Zonal Council and community levels. This has impacted negatively on the transparency, accountability and the sustenance of projects and programmes. The study concludes that stakeholders were rarely involved in M&E of projects and programmes due to lack of concerted effort by the MPCU for grass root stakeholder participation and poor attitude on the part of community level stakeholders in M&E of projects and programmes.

2.7 Capacity Building for M&E and Performance of Health Programmes

This study measured capacity building for M&E using technical expertise in M&E, training and supervision, M&E workforce development plan, IT infrastructure and M&E capacity assessment. Capacity building can help bridge the gap between data demand and utilization and planning. Project sustainability will almost certainly be harmed if officials and, indeed, farmers are lacking in capacity. Many countries have had success with capacity building in M&E (Murei, Kidombo & Gakuu, 2017). In comparison to the rest of the world, the performance of health programs in Sub-Saharan Africa is still poor. Sub-Saharan Africa continues to lag behind the rest of the globe in terms of the number of programs.

Many countries have significantly restricted capabilities for basic monitoring and assessment (Bhat, Galloway & Landa, 2017). The following are some of the questions that arise: Are there any workshops or lectures available? Is there a focus on monitoring & evaluation content during field visits? Monitoring and evaluation must be of high quality. After completing formal schooling, it also covers human resource development. Attendance at these courses, empowerment and training should all be tailored to fit the needs of capacity building. The following questions arise: Whose capacity and usage are being developed? Are there any soft capacities being developed in this study, such as motivation, confidence, or a trustworthy relationship? What methods are used to improve capacities?

Senior officials from 12 African countries met in Abidjan, Cote d'Ivoire, with representatives from 21 international development agencies to acknowledge that building African capacity for monitoring and evaluation improves governance and urged for training in monitoring and evaluation procedures (OED & AfDB, 2018). The African Evaluation Association (AEE) stated in a conference later that year in Johannesburg, South Africa, that developing capacity in monitoring and evaluation must aim to enhance skills and tools as well as raise awareness about the importance of monitoring and evaluation and how to apply it (AfDB, 2016). The African Institutions Forum decided in a 2016 summit in Casablanca, Morocco, that African institutions ought to do more to increase their capacity to monitor and evaluate, and that M&E must be seen as valuable in Africa.

Individuals and organizations' capacity refer to their ability to complete tasks efficiently and effectively. Capacity development is the process of enhancing formal

firm links and values, as well as skills and associations, in order enable groups and firm to find out functions and accomplish desired goals. According to Simister and Smith (2015), capacity, if a person or a firm varies throughout time, necessitating attention in order to meet changing demands (Rogito, Maitho & Nderitu, 2020). Furthermore, capacity is divided into three levels: person, firm, and environmental, all of which require the supply and use of M&E data, and research and long-term sustainability.

According to a World Bank and Africa Development Bank report (2020), the main impediment to successful monitoring and evaluation capacity development in Sub-Saharan Africa is a lack of demand, which originates from the public sector's lack of performance orientation. Officers must be trained in current data gathering methods and analysis. Capacity in the workforce is required to build and sustain M&E systems. Donors and governments are increasingly recognizing the importance of continuing to invest in and support capacity development in order to facilitate M&E planning, M&E data use, and monitoring and evaluation research and surveillance for long-term sustainability (Sutherland, 2018). The Ministry of Health personnel cannot be change agents to help bridge the gap between County Maternal Health cases unless they have the necessary monitoring and evaluation knowledge. As a result, capacity development is a must throughout Kenya, and particularly in Nyeri South.

In a research on the influence of management practices on the sustainability of youth income-generating projects in Kangema District, Murang'a County, Kenya, Karanja (2016) focused on training, leadership, and financial management components in connection to project sustainability. According to Karanja (2016), youth project sustainability is influenced by training, leadership, and good monitoring and evaluation. Poor skills in results-based monitoring and evaluation community-based programs also have an impact on monitoring and evaluation. The efficiency of monitoring and evaluation activities is harmed by a lack of training for those responsible for them and an unclear institutional framework for performing them, according to this study.

Development achievements are recognized by Rist (2014) and emphasizes the need of monitoring and assessment by utilizing evaluation data to improve the education sector. Odhiambo (2015), on the other hand, claims that in Kenya, assessments are

solely focused on inputs and outcomes, ignoring the impact of NGOs with donors and officials lacking in monitoring and evaluation skills as their primary drivers. In a study on the sustainability of new programs and innovations, Stirman et al. (2017) note that capacity and factors related to the new program or practice themselves are influencers of sustainability. Monitoring and evaluation is characterized by weak coordination within and between government programs in most developing countries, as well as a shortage of human capacity, particularly in evaluation. As a result, greater training in evaluation techniques and processes is required. In most situations, donor countries develop evaluation standards, while developing countries must build their own evaluation standards.

The health industry in Kenya has a difficulty due to the low capability of quality assurance bodies. Workforce capacity is necessary to build, support, and maintain current systems. Officials must be trained in data collection, monitoring, and analysis, which can be challenging in many underdeveloped nations (Otieno & Atieno, 2018). According to the findings of the study, those working in the Ministry of Health, as well as those in County Maternal Health groups, may need to attend workshops, seminars, or conferences on a regular basis to refresh their skills in areas such as planning, coordination, surveillance, data use, ICT, and methodology.

Monitoring and evaluation capacity-building activities should provide a crucial relationship between planning and feedback on the facts, i.e. what is happening on the ground, mutual learning and re-planning, and health-program sustainability. These are interactive procedures that need collaboration between project Monitoring and evaluation staff and other stakeholders, particularly partner organizations. Cooperation with individuals in charge of implementing specific project components/sub-components must go beyond standard reporting requirements (Adrien & Jobin, 2018). Joint identification of ongoing evaluation needs, including diagnostic and troubleshooting studies, and collaboration in data collection and beneficiary assessments are also critical.

In order to improve project sustainability, there should be a good working relationship between the project's monitoring and evaluation and capacity-building efforts (Rogito, Maitho & Nderitu, 2020). All newly hired employees should go through a formal induction program that focuses on the log frame and results framework, as well as the

project's various components and associated monitoring and evaluation requirements (IFAD, 2017), the complementary roles of the monitoring information system and monitoring and evaluation, and the connections between progress monitoring and routine Monitoring Informa.

In accordance with the overall project management criteria, each implementing agency participating in the project should be obliged to build its own monitoring and evaluation capabilities. Monitoring and evaluation professionals should be in charge of day-to-day tasks, with the help of monitoring and evaluation officers and administrative/secretarial support. The implementing agencies may require technical assistance from national and/or international institutions at various stages of system implementation due to the project's complexity (OECD, 2017). The project's objective is to provide an ordered and systematic approach to analyzing and managing a set of investment opportunities. The project's design also facilitates the exploration of different options (IFAD, 2017). Furthermore, the expected outputs and outcomes can be compared to other proposals in the same industry.

Several methodologies and interventions for M&E capacity building have been proposed. Douglah et al. (2016) highlighted many that have been utilized by development organizations all around the world to increase M&E performance. Leadership development, adequate resource allocation, team building, coaching, mentorship, exchange visits, technical support, and short and long-term training are among them. Aside from that, they claimed that demand for M&E rises when there are: (i) well-positioned individual and institutional champions across the system; (ii) incentives that link performance data, monitoring information, and evaluation recommendations to results-oriented resource allocation; and (iii) commissioning of appropriate evaluations that are based on existing literature. Contextual and behavioral determinants have a moderating effect on the relationship between monitoring and evaluation procedures and health program success in Kenya, which is different from what is being done by development organizations around the world to increase M&E performance.

In their study on the drivers of effective monitoring and evaluation of strategy implementation of community-based initiatives, Mugabe and Kanda (2016) find that inadequate monitoring and evaluation skills have an impact on such programs. They

suggest that more research be done on the problems that field employees working in community-based programs face when conducting monitoring and evaluation tasks. This can highlight elements that need to be carefully considered in all community-based project monitoring and evaluation efforts in order to achieve good project outcomes. In contrast to the moderating effect of contextual and behavioral characteristics on the connection between monitoring and evaluation procedures and health program performance in Kenya.

Evaluation capacity building (ECB) activities and their impact on general M&E practice among non-governmental organizations in Kenya's central eastern counties was conducted by Kithinji (2019). To perform a descriptive survey, the study was guided by the pragmatism paradigm. The sample analyzed was obtained using stratified random sampling. Primary data was collected using a structured questionnaire with Likert-type items anchored on a five-point scale, which was triangulated using data from interviews. The findings revealed that organizations in the region are engaging in a variety of unstructured activities to improve evaluation capacity, which are carried out to varied degrees and have an impact on M&E practice. Organizations should invest in ECB initiatives, particularly those that build capacity in M&E professional development and developing M&E support structures, according to the survey, as these are believed to contribute more to improved M&E practice. They must, however, be systematized and balanced in order to meet the M&E capacity requirement. Organizations must devote greater resources to this area. In addition, an ECB model that may be utilized in a simple in the region must be developed and tested. Contextual and behavioral characteristics have a moderating effect on the relationship between monitoring and evaluation techniques and health program performance in Kenya.

Furthermore, a holistic, learning-centered approach to help development organizations increase assessment capability was done by Lennie, Tacchi, Wilmore, and Koirala (2015). For time- and resource-strapped organizations in impoverished nations, this poses significant hurdles. Approaches to evaluation capacity development (ECD) that are appropriate and effective for such organizations are required. According to the study, this necessitates a long-term, holistic, participatory, learning-centered approach focused at developing learning organizations and increasing the ability of entire companies as well as their stakeholders. It also needs to take into account local

knowledge and ideas, as well as continuing ECD activity meta-evaluation. This study explains how this approach was used in a four-year action research project with a Nepalese non-governmental organization. Based on the findings of this project and other follow-up actions, the study proposes several principles and strategies for planning and executing an effective and long-term approach to ECD that can assist to address the numerous obstacles and issues found by the study. In contrast to the moderating impact of contextual and behavioral characteristics on the connection between monitoring and evaluation procedures and health program success in Kenya.

A research on mid-programme capacity building: an international education development program in Malawi was done by Coryell, Sailors, Nelson, and Sehin (2016). This essay examines a case study of a mid-program capacity development evaluation in a big education aid program collaboration between Malawian non-governmental educational organizations and US university literacy experts. The program's official and informal capacity-building inputs are described in this article. Data on capacity building obtained at the halfway point of the program is analyzed. The authors claim that capacity is formed over the course of a big program's life cycle, and that assessing capacity development (and recognizing its obstacles) before the program's end can aid cross-national teams of administrators and implementers in making changes to the program's operations. In contrast to the moderating impact of contextual and behavioral characteristics on the connection between monitoring and evaluation procedures and health program success in Kenya.

National Evaluation Societies are Communities of Practice that aim to help its members improve their monitoring and evaluation capacity. The study uses data from a survey of 35 National Evaluation Societies in 33 low- and middle-income countries to determine how successful capacity building efforts have been and what factors explain relative success or failure. Because the study is primarily interested in multiple approaches to ensure successful National Evaluation Societies, it relies on Qualitative Comparative Analysis. Regular face-to-face contact is a critical component, according to our findings. This isn't altogether surprising, given that monitoring and assessment capacity building frequently entails tacit information that is best transmitted face-to-face. Furthermore, developing capacity for conducting and, more importantly, using evaluations necessitates the formation of networks between the monitoring and evaluation supply and demand sides, which is best accomplished

through regular face-to-face engagement (Dewachter & Holvoet, 2016). Contextual and behavioral characteristics have a moderating effect on the relationship between monitoring and evaluation techniques and health program performance in Kenya.

The purpose of this study was to examine the influence of monitoring and evaluation systems on performance of projects in non-governmental organizations: A case of education projects in Mombasa County (Rumenya & Kisimbi, 2020). A descriptive research design was used in this study and structured questionnaires were used to collect the study data. The participants were voluntary sampled into the study sample through self-administering of online based questionnaire. Collected data was downloaded from kobo-collect online platform and exported to Excel and SPSS for further processing. Descriptive and inferential statistics were generated and used to interpret the nature of relationship between the predictor variables and the dependent variable. The study established that the performance of projects in education sector significantly and positively correlated with human resource capacity for M&E ($r=0.412$, $p<0.05$).

2.8 Data Management for M&E and Performance of Health Programmes

This study measured data management for M&E using M&E indicators selection, routine data collection, data storage & analysis, M&E information dissemination and M&E information use. According to Segone (2018), most stakeholders in the projects reviewed do not recognize the significance of the monitoring and evaluation findings, citing the World Bank Independent Group as an example. This demonstrates that there is a discrepancy between existing and required information for project sustainability. According to Odhiambo (2015), evaluations in Kenya have yet to achieve acceptable levels. They only deal with particular components of the result chain, such as inputs and outputs, at the expense of impact, are driven by activist and donor demands, and are carried out by evaluators who lack the necessary knowledge. There is a need to focus on the following in terms of demand and use: documentation of old and recent information; use of data; requirement for data; data correctness and relevance.

To ensure sustainability, monitoring and evaluation systems should be demand-driven rather than supply-driven. Data for monitoring and evaluation should be produced at a low cost. According to Patton (2015), pricey monitoring and evaluation data has no

value. Demand and use monitoring and evaluation is an important practice that must be focused on certain target groups (Segone, 2018). The creation of monitoring and evaluation capabilities can go a long way toward ensuring that the data generated is in demand and used appropriately. The use of monitoring and evaluation outcomes is a primary predictor of project sustainability, and it comes as a result of effective planning, project implementation based on necessary capability, and informed judgments based on sound and relevant data. Furthermore, according to Mackay (2017), monitoring and evaluation data serves as a foundation for feeding back into projects, improving policy analysis and policy creation, and assisting in project and managerial operations. A core practice of monitoring and evaluation is the demand for and utilization of data. However, he points out that the problem in African countries, and possibly other regions, is that, while sector ministries gather a variety of performance data, the data quality is generally poor. In support of this, Ibrahim (2017) points out that such countries have too much data and not enough information. Some developing countries acquire a lot of data that can't be used.

Until recently, Moldova's system was characterized by a low demand for qualitative data and a lack of supply. The focus of statistics investment has been on boosting supply, with little attention paid to generating demand for data and its application in planning (Marie-Helene & Dennis, 2018). Due to a lack of understanding regarding the end users, an excessive amount of data is collected that is useless. In order to ensure that monitoring and evaluation findings serve to ease the problem of relevance, there is a need to pay more attention to timeliness when publishing them (Segone, 2018). To address the inherent problems, indicators should be dispersed in accordance with what they are supposed to measure: inputs, activities, outputs, outcomes, or effect.

In addition, the indicators must be particular in terms of quality, time, target group, and location. Lower tiers of project management offices in China simply collected and tallied data before passing it on to the next level without analyzing or reflecting on it. This was a roadblock. Simultaneously, project management offices struggled with an abundance of data, which hampered analysis and resulted in monitoring data being reviewed only once a year (China Watershed Management Project Report, 2016). As a result, reliable data must be collected for convenience of use. Projects must systematically identify, analyze, and respond to risks in order to ensure that project benefits continue after the project is over. Many monitoring and evaluation systems,

according to Potter et al. (2016), are complex and attempt to monitor too many issues. Furthermore, Potter et al. (2016) advocated for the technological simplification and user friendliness of monitoring and evaluation systems. Riddell et al. (2017) conclude that the data quality is astonishingly poor, drawing a consistent and recurrent conclusion across nations and in respect to all clusters of investigations. This research found that several committees involved in data collecting and analysis for monitoring and evaluation need to be trained.

Some emerging countries, such as Brazil, Chile, and Turkey, have made headway in tying spending to output and result goals. Malaysia and Uganda have passed rules to make the financial process more open, responsible, and results-oriented, but in different ways. The application of monitoring and evaluation outcomes enhances the effectiveness of action and, as a result, its long-term viability (Woodhill, 2015). In monitoring and evaluation practice, relevant methodologies must be chosen, whether quantitative or qualitative, and the goal for which the data will be used must also be considered. Monitoring data and evaluation findings must be produced by the monitoring and evaluation system. This is especially important for key stakeholders, and it can be utilized to improve government performance, respond to a sufficient demand for monitoring and evaluation work, and ensure its funding and long-term viability (Mackay, 2017). The fundamental difficulty in many nations is the lack of demand for monitoring and evaluation data, which is a challenging barrier to overcome.

Too much data collection is an issue, and it may lead to a situation where people are less likely to contribute high-quality data since the information will not be used. Building trustworthy government data systems is necessary to deliver the basic data that monitoring, and evaluation systems will rely on (Mackay, 2017). Clearly, only a few government personnel have received training in modern data gathering and monitoring methodologies, and even fewer have received training in how to evaluate various data modalities (Kusek & Rist, 2014). Auditing data systems and diagnosing data capacities, as well as expertise engagement in conducting surveys, censuses, and data management, are the solutions in this scenario. Few statistics officers and organizations support sector ministries in developing nations in strengthening their administrative data systems, improving data collecting on project delivery, beneficiary satisfaction with government services, and employing information in project evaluation.

The amount to which monitoring and evaluation information is used is the true assessment of a monitoring and evaluation system, not its ability to provide trustworthy monitoring data and evaluation findings. Data verification and auditing are required if evaluations are undertaken internally within government. Alternatively, the task can be outsourced out to universities and consultants, but this comes with the risk of losing control of the findings, as well as objectivity and credibility (Bamberger, 2018). Monitoring and evaluation mechanisms have been successfully implemented in some nations. These include Chile, United States, Colombia, and Australia.

According to documented experiences, this activity is tedious and demands patience and perseverance. It also takes time to construct or strengthen systems, train or recruit appropriate people, organize, manage, and perform evaluations, and build methods for exchanging monitoring and evaluation data among ministries, as well as train staff to apply monitoring and evaluation data in their daily work. The extent to which clients and stakeholders are involved in all phases of the evaluation process is one of the primary drivers of whether or not an assessment will be useful and whether or not the findings will be used. The customer should be kept up to date on the evaluation's progress and preliminary findings as they arise. They should be updated on a regular basis and given the opportunity to respond before the process is completed (Bamberger, 2018). There is a need to examine the demand for data seriously and determine the level of use and specific methods of utilization (Mackay, 2017). As more and more governments in developing nations realize, sound data demand and usage systems may help them enhance performance.

The main goal of monitoring and evaluation data demand is to assist management in making timely and successful project planning, monitoring, and management decisions (Lecuit et al., 2016). Monitoring and evaluation data is essentially a system that use structured methods to give suitable information from internal and external sources to management at all levels, hence influencing the sustainability of health programs (Vernon, 2018). Accounting software and a database management system for planning and non-accounting data are typically used in monitoring and evaluation.

The baseline is the first crucial measurement of the performance indicators, and it serves as a starting point, or guide, for monitoring project or program performance in the future (Kusek & Rist, 2014). As a result, baseline data should be gathered for each

identified outcome indicator at the very least. Setting target values is crucial since the success of a project will be judged in part by comparing target values to achieved or real values. To arrive at the performance target, one technique is to start with the baseline indicator level, utilize historical data or another estimate of the rate of change to define the desired level of advancement - while keeping in mind the available funds and other resources over the target period. Although it may be tempting to establish low expectations in order to ensure that they are met, setting high enough targets is critical to ensuring project execution momentum and the achievement of the theory of change ideal of transformation.

The monitoring and evaluation data results framework, which has been incorporated into the preparation of World Bank-assisted projects since the end of 2004, is a critical step toward a more results-oriented approach to project work. One of the main goals is to put a lot of emphasis on the expected intermediate outcomes and the development goals that the targeted project beneficiaries should attain (Rist, 2014). The majority of the projects that were developed using this framework are currently being implemented, and practical experience with monitoring and evaluation implementation has yet to be fully documented.

Information essential for monitoring resource availability and utilization, as well as the number, quality, and appropriateness of outputs provided, must not be overlooked when focusing on higher level project results. The project results framework may give the wrong impression by relegating such information to other areas. Not only is such data of low value, but it is also not a necessary component of the entire monitoring and evaluation system. This would imply, at best, not addressing project management's fundamental information demands, and, at worst, rendering a project's monitoring and evaluation system useless to implementing agencies and field managers (Lecuit et al., 2016). This could mean that the separation between the management information system (MIS) and the monitoring and evaluation system, which has been seen in some completed projects, will recur.

A study on digitizing data gathering and altering data management systems in Pakistan's tuberculosis control program, with the goal of evaluating the performance of the ODK Scan paper-to-digital system over a three-month testing period was conducted by Ali et al. (2016). To understand how people use technology, researchers

used a sequential, explanatory mixed-method research methodology. The four field workers received training, smartphones, the application, and 3G-enabled SIM cards. To examine the impact of ODK Scan, baseline measures of data management aspects were recorded and compared with end line metrics. Users' feedback on app usability, user interface design, and workflow modifications was also collected at the conclusion of the study. The server yielded a total of 122 patient records, which were assessed for quality. ODK Scan was found to accurately recognize 99.2% of multiple-choice fill-in bubble responses and 79.4% of numerical digit responses. However, when compared to manually entered data, the overall quality of the digital data was lower. Data aggregation and data transfer operations required significantly less time using ODK Scan, but data verification and form-filling activities took longer. Field workers saw the value in utilizing ODK Scan, but they were more concerned about the time-consuming aspects of using it, according to interviews. As a result, the adopting organization should focus on ensuring little disruption to existing workflows, continuous feedback, and value enhancements in order to ensure technology acceptance and workflow improvements.

A report summarizing monitoring and evaluation for three European environmental regulations in nine different situations across Europe was compiled by Waylen, Blackstock, Van Hulst, Damian, Horváth, Johnson, and Oprina-Pavelescu (2019). The data presented in this DiB article give an overview of monitoring and evaluation (M&E) for three European environmental policies as they were implemented in nine different countries (Catalonia (Spain), Estonia, Finland, Flanders (Belgium), Hungary, Romania, Slovakia, Scotland (UK), Sweden). These figures are based on reports and documents about monitoring programs that were made public in 2017. The concerns that were extracted and summarized were structured by the literature on M&E to facilitate adaptive management.

Furthermore, data issue considerations for natural resource and environmental monitoring and evaluation—a case study of Shangri-La County, Yunnan Province was established by Dong, Li, Li, Jiang, Li, Yan, and Li (2015). Researchers should focus on data sources and stress data quality that is of relevance to diverse stakeholders to improve the dependability and sustainability of the M&E system subjected to the NRE. An in-depth metadata analysis based on the NRE's M&E indication system is presented in this study, which includes two methodologies and a typical practical case:

(1) Metadata tracking approach – establish fundamental parameters for each indicator, such as publisher, creator, coverage, update cycle, and kind; (2) Questionnaire survey approach - enlist the help of some academics, consultants, and citizens to assess the feasibility and accessibility of the 22 M&E indicators' data sources. (3) practical scenario – collect data for dynamic NRE monitoring in Shangri-La County, Yunnan Province, China, which includes a poor economy and flawed statistics systems. The purpose of this study is to investigate the basic status of M&E data in a large county-governed area in China, with the goal of improving the NRE's M&E system's stability at the county level.

The management of a big data project was evaluated by Dutta and Bose (2015) in the example of Ramco Cements Limited. Our two-fold goal in this paper is to develop a new framework that can provide organizations with a holistic roadmap for conceptualizing, planning, and successfully implementing Big Data projects, as well as to validate this framework through observation of a descriptive case study of an organization that has done so. Although the manufacturing industry has been sluggish to adopt analytics in strategic decision-making, this is changing as the use of analytics for product development, operations, and logistics grows. The purpose of this study is to look into a Big Data project at a manufacturing company in India, Ramco Cements Limited, and to detail the system that they developed as well as the benefits that resulted from it. Using the proposed framework as a lens, investigate the entire process of project implementation. Our findings show that a clear understanding of the business problem, a detailed and well-planned step-by-step project map, a cross-functional project team, the use of innovative visualization techniques, top management's patronage and active involvement, and a culture of data-driven decision making are all necessary for a Big Data project's success.

A research was done on a web-based monitoring and evaluation system for government projects in Tanzania: The Case of Ministry of Health by Mleke and Dida (2020). The study collected representative data from three monitoring and evaluation staff, four ICT staff and five project members by using interviews, focus group discussion and document review. The result showed that the electronic monitoring and evaluation system will solve a presented challenge. Development of a web-based monitoring and evaluation system for the ministry of health projects will provides

timely, accurate information, that for tracking the implementation progress of projects improved monitoring and evaluation.

2.9 Moderating Influence of Contextual Determinants and Performance of Health Programmes

This section presents reviewed literature and studies relevant to Contextual determinants and Performance of Health Programmes. Contextual determinants were assessed using organizational structure, organizational culture, political-legal environment, communication structure and organizational strategy. The destinations of the hierarchical structure are to arrange distinctive parts of the association and diverse regions of work; give adaptability so as to react to changing natural requests; screen the exercises of the association; give social fulfillment to individuals from the association; guarantee successful and effective authoritative execution, including the usage of assets; and give responsibility of regions of work attempted by gatherings and individual individuals from the association. There are six noteworthy measurements as segments of hierarchical structure; formal announcing relationship dimension of power and range of control; inspiration of representatives through frameworks of execution examination; frameworks for correspondence of data, mix of exertion and interest in authoritative exercises; designation of power and giving methods to checking and assessing the activity; distribution of individual errands and duties, work specialization and definition and gathering together of segments, offices, divisions and bigger units (Hamstra *et al.*, 2018).

The various leveled measurements of structure, for example, intricacy, formalization and centralization have gotten more consideration than some other (Kandie, 2016). Every one of these measurements is likewise the overwhelming qualities of an outstanding auxiliary sort. Multifaceted nature alludes to the level of separation that exists inside an association. Formalization alludes to an association where there are unequivocal sets of expectations, loads of authoritative guidelines and unmistakably characterized techniques covering process. The degree to which the right to make decisions and evaluate actions is concentrated is referred to as centralization. Among the studies reviewed, none of the study elaborated explicitly the effect of organizational structure affects the performance of Health Programmes. The appraisal and estimation of hierarchical culture has normally centered around authoritative

qualities. A third part of social research has been the job of an association's way of life (and its basic qualities and philosophy of the executives) in obstructing or attaching the usage of administrative advancements or mechanical developments (Melchar & Bosco, 2015).

According to Kandie (2016), power culture is exemplified by a single source of intensity from which impact beams travel across the organization. The quality of a job culture is defined by the organization's capabilities and advantages, which are facilitated and constrained by senior officials. The inner condition is ruled by tenets systems and sets of expectations. A bureaucratic culture is progressive, segmented, and structured, with clearly defined lines of responsibility and specialists. An inventive culture references to a workplace that is creative, results-oriented, and testing. A strong culture demonstrates cooperation and a people-centered, trust-building environment. Despite the fact that there are a variety of typologies, orders, and instruments for assessing authoritative culture, there is little agreement on which ones are more appropriate or superior than the others.

Most ICT frameworks bomb because of absence of the executives' consideration regarding complex authoritative components wanting to focus exclusively on specialized or key issues. Through the audit of the above writing it is clear that authoritative culture has an effect on execution of the executives' data frameworks. Be that as it may, these examinations were led in business associations and not government possessed foundations. Leaders have the potential of improving project. Transformational and transactional management are the two styles of management used in this study. Transformational management will be described as management styles that affect followers' perceptions of the value of desired outcomes and the methods for achieving them. Idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration are all components of this form of management (Hamstra *et al.*, 2018).

Similarly, in a study on the role of servant MIT projects in Kenya, Gwaya (2014) confirms that human factors have a direct correlation on the performance of projects. More studies established the importance of human factors increased concurrently as projects became more complex coupled with this, project manager's management ability have been reported to have a direct correlation with project outcome. Though

project management in some cases is singled out as an individual contributor to poor performance of projects, it is seen to transcend all other project and organizational factors. Overall, Type of management affect project culture, project strategy and project team spirit. Transformational type of management on the other hand, is considerate and people oriented, shows concern for subordinates (Melchar & Bosco, 2015).

Technological complexity measurements are vital for assisting Performance of Health Programs management in making judgments about which new items to make and how to manufacture them. Once a product's technological complexity level has been determined, feasibility studies can be conducted to determine the plant's capacity to produce it. Outsourcing management, the adoption of Web and consumer technologies, support for mobile workforces, developing and managing technology architectures and governance for those workforces, and ensuring security in a distributed environment all add to the complexity of information technology in health programs. Outside of its direct control, compliance constraints, the need to support worldwide operations, and the speed and depth of information access needed by your customers and partners all add to the complexity. The fact that many Health Programs have technology systems that have been built up over time, acquired through acquisitions, or complicated by numerous waves of vendor consolidation adds to the complexity difficulty. Companies can decrease the high levels of complexity associated with information management by implementing a complete big data architecture to manage both structured and unstructured data. Finally, an IT stack that has been designed and developed to work together can save time on routine maintenance, integration, and testing. Simplifying the IT infrastructure can free up time, money, and resources for more strategic, growth-oriented tasks (Davis & Daniels, 2015).

A report on the CHWs' performance in Western Kenya and describe determinants of that performance using a multilevel analysis of the two levels, individual and supervisor/community was assessed by Kawakatsu et al. (2015). This study conducted three surveys between August and September 2011 in Nyanza Province, Kenya. The participants of the three surveys were all 1,788 active CHWs, all their supervisors, and 2,560 randomly selected mothers who had children aged 12 to 23 months. CHW performance was generated by three indicators: reporting rate, health knowledge and household coverage. Multilevel analysis was performed to describe the determinants

of that performance. The significant factors associated with the CHWs' performance were their marital status, educational level, the size of their household, their work experience, personal sanitation practice, number of supervisions received and the interaction between their supervisors' better health knowledge and the number of supervisions.

A study on the influence of contextual factors on the adoption and development of Electronic Theses and Dissertation (ETD) programmes in the Arab Gulf States was explored by Alsalmi, Liew and Chawner (2014). Semi-structured interviews were conducted with representatives of five groups of stakeholders with an interest in the implementation of ETD programmes. The groups were postgraduate students, academic staff, library managers, system administrators, and postgraduate officers from five Gulf States universities. In addition, an online survey was conducted with 309 participants in order to test and explore, in a larger sample, the issues identified in the interviews. Research participants identified three levels of factors; contextual, institutional, and personal. In addition, they highlighted that contextual factors have an influence on institutional factors. These contextual factors include misunderstanding of plagiarism, strong economy, recency of research programmes, and younger societies.

2.10 Moderating Influence of Behavioural Determinants and Performance of Health Programmes

This section presents the literature for behavioural determinants influencing the performance of Health Programmes. Behavioural determinants were assessed using implementer's knowledge, skills & competencies, implementer's attitude & practices, workload management, staff motivation and managerial support. Mentality is a subjective factor of execution that is individual as opposed to authoritative. In this way, to control for authoritative execution, center around the job of the individual should be considered. In spite of the fact that estimating frame of mind isn't a simple errand, the dimension of help of hierarchical execution frameworks by a worker and the ability to help colleagues accomplish their objectives are markers that can be utilized to quantify a person's demeanor towards work. Having similar perspectives, Whitley and Kite (2015) demonstrate that a worker with low confidence and negative work demeanor is probably going to be more engaged with indiscipline cases than one

with a positive mental work disposition. Every single other factor being equivalent people with constructive work demeanors perform superior to those with adverse dispositions.

This framework joins venture forms with execution markers and implementers. Other than a checking and assessment framework being upheld by Information Communication Technology (ICT), the task implementers and evaluators ought to have the required M&E abilities important for execution estimation. At first spearheaded by activity look into situated activities and associations, the utilization of participatory methodologies and strategies has turned out to be progressively mainstreamed. The utilization of instruments, for example, social mapping, Venn charts, riches positioning, and transects have turned out to be ordinary practice in much improvement work. These prompted services starting to incorporate participatory philosophies in rules gave to neighborhood governments to creating civil advancement designs, for example, in Benin and Mali. Participatory conclusion, need setting, and arranging have turned into an acknowledged ethic and are drilled in many Northern and Southern advancement activities. Notwithstanding, it wound up vital that 'interest' ought to likewise address execution, checking and assessment. There is a quickly developing enthusiasm for guaranteeing more extensive cooperation, and since the mid-1990s, participatory monitoring and evaluation (PM&E) has gotten expanding consideration. In the course of recent years, PM&E has picked up significance over progressively customary ways to deal with M&E. While M&E in the past has been judgmental, PM&E looks to include every single key partner during the time spent creating structure for estimating results and pondering the tasks' accomplishment and proposing arrangements dependent on neighborhood substances (Coupal, 2017).

Partner investment implies enabling advancement recipients as far as assets and necessities distinguishing proof, anticipating the utilization of assets and the real execution of improvement activities. Best practice precedent exhibits that a focal factor encouraging refresh of assessments is partner inclusion. This inclusion must be acquired at the beginning times of the Evaluation procedure, incorporate the help of high – profile champions and draw in political specialists keen on learning or utilizing instruments to exhibits adequacy. Proudlock (2016) additionally discovered that the entire procedure of effect assessment and especially the examination and elucidation

of results can be incredibly enhanced by the interest of planned recipients, who are after all the essential partners in their very own advancement and the best judges of their own circumstance. There are the individual's will's identity welcomed and the individuals who won't be welcomed in the ID of undertakings in CDF. The activities recognized by those near the MP are said to be passed as having been distinguished by the network (Schaaf, Topp & Ngulube, 2017).

It is pivotal in this way that sufficient time is figured in for the important interest of all partners in characterizing the reason and extent of effect assessments, Proudlock, (2016). The key issue is whether the inquiry being presented in the effect assessment are significant to these necessities. In the event that they are not, there is a high likelihood the assessment won't see generous take-up, Patton, (2015). The CDF is for all intents and purposes under the control of government officials who propose the undertakings in their supporters as well as present and vote in favor of their evaluations in Parliament. This incorporates MP as executive, except if he/she quits where the CDFC chooses, two councilors, one District Officer inside the territory, two religious pioneers, two delegate of men, two agents of ladies, one delegate of ladies, one agent of youth, an agent of Non-Government Organizations inside the region and a limit of three different people from the electorate with the end goal that the number doesn't surpass fifteen. An officer is approved by the Board as an ex-officio part. It further reports that in a few territories inside the nation, the greater part of the undertakings have either slowed down or neglected to commence; in others, trashy execution by shippers had been noted. Nonetheless, no orderly investigation has been done and uncovered to people in general to help these contentions. A report by Donaldson (2016), uncovers that venture that were started somewhere in the range of 2012 and 2013 adding up to more than 12 billion the majority of them are yet to be finished.

The implementers in numerous associations are the specialists. Checking upgrades venture the executive's basic leadership amid the usage in this way expanding the odds of good task execution Crawford and Bryce (2016). It likewise encourages straightforwardness and responsibility of the assets to the partners including benefactors, venture recipients and the more extensive network in which the undertaking is executed. It is generally concurred that there are two kinds of inspiration, to be specific outward and natural. Inborn inspiration is that conduct which

an individual deliver due to the charming encounters related with the conduct itself (Mosley, Pietri & Mosley Jnr, 2014). They come from inspiration that is normal for the activity itself. Precedents are accepting positive acknowledgment, gratefulness, a feeling of accomplishment and addressing the difficulty. As per Ludwig, Walton and Beer (2014), inborn prizes gather from playing out the assignment itself, and may incorporate the fulfillment of achievement or a feeling of impact. Models incorporate pay, advantages and working conditions. Outward rewards originate from the association as cash, perquisites or advancements from managers and collaborators as acknowledgment. Workers are inspired by a mix of the two components at some random point in time (Riggio et al., 2016).

The behavioural factors influencing individual's investment decision in Nairobi Securities Exchange was conducted by Kimeu, Anyango and Rotich (2016). The research was guided by prospect, herding, heuristic and Expected Utility theories of behavioural finance. The research population was individual investors who had invested in both equity and bonds in the Nairobi Securities Exchange as at the end of third quarter of 2015. The study came up with a sample size of 80 respondents. Simple random sampling technique was used to determine the respondents of the study. Primary data was collected through the use of closed ended questionnaires, pick and drop procedure was used to collect data through the use of registered offices of stock brokers. Descriptive statistics such as mean and standard deviation was used in data analysis. Inferential statistics which included correlation analysis and regression analysis was also used in interpreting the results of the study. Tables and graphs were used to present the data collected for ease of understanding. The results of the study shows that investment decisions in the Nairobi Securities Exchange are positively influenced by behavioural factors including prospect, herding, heuristic and rationality.

A research on the behavioral factors influencing investment performance of individual investors in Nairobi Security Exchange was analyzed by Ong'eta (2021). The investigator hypothesized that H01: The following behavioral factors-herding, prospect (loss aversion, regret aversion, and escalating the commitment) and heuristic (availability bias and overconfidence) and investment decisions-are not significantly correlated with each other in the NSE and H02: the following behavioural factors-herding, prospect (loss aversion, regret aversion, and escalating the commitment) and heuristic (availability bias and overconfidence) combined together do not significantly

influence the investment performance in the NSE. In order to achieve the set objective, the investigator adopted survey research design targeting 1,196,995 individual investors in Nairobi Securities Exchange. The Slovin's formula was used to estimate the 400 sample size of a population whereas the researcher took the high limit of 500 individual investors in Nairobi Securities Exchange. Structured questionnaire was used to collect primary data. The study established that loss aversion and overconfidence behaviour was displayed by the individual investors at a high level.

2.11 Conceptual Framework

The relationship between independent variables, dependent variables and moderating variables is depicted in Figure 1.

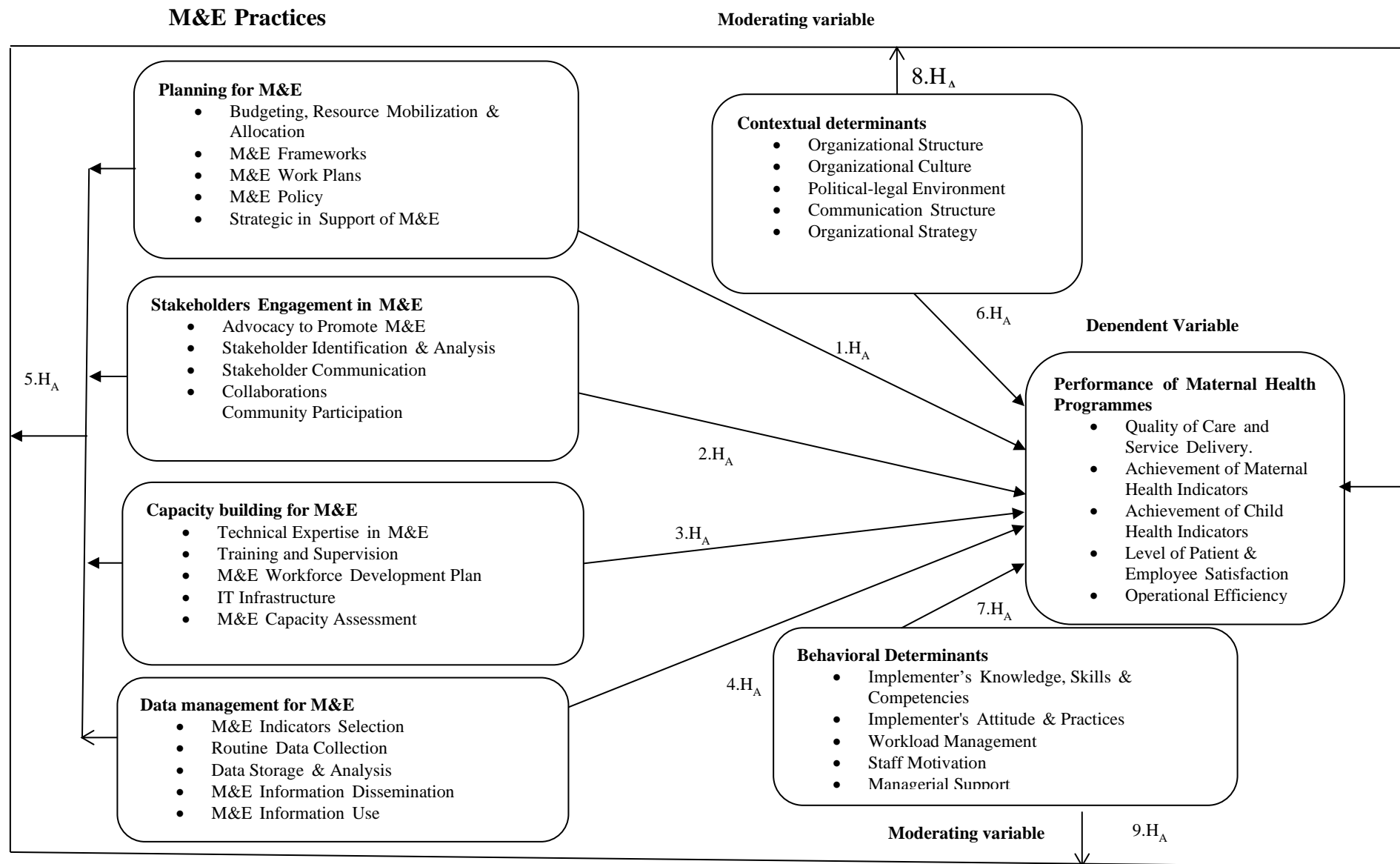


Figure 1: Conceptual Framework of the Study

Figure 1 depicts the conceptual framework for this study, which depicts the perceived relationship between independent, moderating, and dependent variables. The independent variables itemized as planning for M&E, stakeholders' engagement in M&E, capacity building for M&E, M&E data use are seen to be influencing and determining the level of Performance of County MHP. Review of literature showed that monitoring and evaluation are important factor of organization performance. Such processes include resource allocation for M&E, resource mobilization/funding, budgeting, M&E work plans/ frameworks, M&E policy, strategic planning in support of M&E was tested in hypothesis H₁.

Similarly, literature review indicated that stakeholder engagement is important for performance of County MHP. The extent to which specific Stakeholder engagement such as advocacy to promote M&E, stakeholder identification, stakeholder analysis, communication, collaborations/partnerships, community participation are likely to affect the performance of maternal health programmes. The influence of Stakeholder engagement on performance of maternal health programmes was tested in hypothesis H₂. Further, as shown in the conceptual framework, capacity building for M&E is perceived to be influencing performance of County MHP. Capacity building for M&E has been documented in literature to have a positive influence on performance of maternal health programmes. Its influence was tested using hypothesis H₃.

Further, as shown in the conceptual framework, Data management for M&E is perceived to be influencing performance of County MHP. Data management for M&E has been documented in literature to have a positive influence on performance of maternal health programmes. Its influence was tested using hypothesis H₄. In addition, moderating effect of contextual determinants (organizational structure/ M&E structure, organizational culture and strategy, management support, IT complexity, communication processes and resources adequacy/financial capacity) on relationship between the M&E practices and performance of maternal health programmes in Kenyan County Governments was assessed using hypothesis H₅.

Further, the moderating effect of behavioral determinants (implementer's knowledge and attitude, implementer M&E skills, stakeholders participation, political leadership, implementers' motivation and training and supervision) on relationship between M&E practices and performance of maternal health programmes in Kenyan County

Governments was tested using H₆ while the combined moderating effect of contextual determinants and human determinants on the relationship between M&E practices and outcomes of County MHP in Kenya was tested using H₇. To establish the moderating influence of behavioral determinants on relationship between M&E practices and outcomes of County MHP in Kenya H₈ was used and H₉ was used to assess the combined moderating influence of contextual determinants and human determinants on relationship between M&E practices and outcomes of County MHP in Kenya.

2.12 Summary of the Literature

In low- and middle-income countries, the performance of health-care programs remains a major challenge (LMICs). In 2015, an estimated 303,000 women and young girls died from pregnancy and childbirth-related complications, with LMICs accounting for 99 percent of these deaths. Access to and availability of skilled health care workers (HCWs) across the maternal care continuum (antenatal, delivery, and postnatal) is critical for reducing preventable mortality and improving maternal health service quality. A monitoring and evaluation plan incorporates a number of accepted best practices in the monitoring and evaluation system. Practices are a collection of activities such as planning and coordination, capacity building, surveillance, and data demand that can contribute to project decision making and learning. According to Scheirer (2017), this has an impact on project sustainability. M&E practices ensure that project outcomes can be quantified at the impact, outcome, output, process, and input levels, providing a framework for accountability and assisting in making informed decisions at the program and policy levels.

A monitoring and evaluation plan incorporates a number of accepted best practices in the monitoring and evaluation system. Practices are a collection of activities such as planning and coordination, capacity building, surveillance, and data demand that can contribute to project decision making and learning. According to Scheirer (2017), this has an impact on project sustainability. M&E practices ensure that project outcomes can be quantified at the impact, outcome, output, process, and input levels, providing a framework for accountability and assisting in making informed decisions at the program and policy levels. The idea of partners' cooperation being developed activities has advanced after some time. Its underlying foundations can be followed back to

network and mainstream cooperation advanced mostly by non-administrative associations (NGOs) during the 1960s. In the late 1980s multilateral offices, for example International Labor Organization (ILO) started to advance partner cooperation being developed tasks and projects.

Building capacity can aid in bridging the gap between data demand and use and planning. Project sustainability will very definitely suffer if officials and, indeed, farmers lack capacity. Many countries have had success with capacity building in monitoring and evaluation. Monitoring and evaluation systems should be demand-driven rather than supply-driven to help with sustainability. Data for monitoring and assessment should be generated as cheaply as possible. Studies done on monitoring and evaluation include; through a survey of selected private schools in Botswana, Likalama (2017) investigated the impact of monitoring and evaluation on financial performance. In a case study of Constituency Development Fund Projects in Kakamega County, Kenya, Barasa (2014) studied the impact of M&E capacity building on project completion. The studies evaluated did not specifically focus on monitoring and evaluating County Maternal Health program methods and performance, as well as the moderating role of environmental and behavioral variables. Therefore, this study aimed at contributing to the understanding of the moderating influence of contextual and behavioral determinants on the relationship between M&E practices and performance of County MHP: the case of County MHP in Kenya.

2.13 Knowledge Gap

The focus of study, methodology used, findings, and gaps in knowledge for the various research studies covered in the literature review are summarized in Table 2.1 together with the current study focus.

Table 2. 1: Knowledge Gaps

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
Planning for M&E and projects relationship	Muniu (2017)	Monitoring and evaluation practices, community participation and sustainability of community water projects in Kenya: a case of Nyeri County	The study adopted a mixed method research anchored on a concurrent triangulation. A Likert scale was used to capture responses. Path analysis which is a regression-based technique was used. Hierarchical regression was used to test for the mediating effect.	The study established that M&E Practices had a significant moderation effect on the relationship between community participation and sustainability of community water projects. However, when the interaction between joint community participation and M&E practices are taken on board there is no significant effect between participation in institution collaboration and sustainability of water projects.	This study focused on community water projects which is different from the current study which focuses on County Maternal Health programmes.
	Wabwoba and Wakhungu (2016)	M&E planning and implementation for projects to enhance ownership and sustainability	An evaluation research design was adopted and a purposive sampling method was used to select key informants from stakeholder organizations and project groups.	Monitoring & Evaluation planning enhances understanding of how County Maternal Health programmes achievements was measured and how to manage the project cycle.	This study focused on the aspect of sustainability as compared to the current study on performance of maternal health programmes in

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
					Kenyan County Governments
	Mugo and Oleche (2015)	Budgetary allocation played a key role in project success.	The study adopted a mixed method research	Their study on the impact of M&E on projects using the Probit Model found that budgetary allocation was very significant to the undertaking because it had large robust coefficient of 0.656939 at a Z statistic of 4.92, and also a high marginal effect of 0.1312997 at a Z statistic of 5.44.	The study focused on Development Projects and Economic Growth while the current study focused on the performance of maternal health programmes in Kenyan County Governments
	Arnold and Gillenkirch (2015)	Using negotiated budgets for planning and performance evaluation: An experimental study	The study adopted a mixed method research	Found out that negotiated budgets for planning and performance evaluation	This study performance of maternal health programmes was done in another country while the current study was done in Kenya.

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
	Mboera, Rumisha, Mlacha, Mayala, Bwana and Shayo (2017)	malaria surveillance and use of evidence in planning and decision making in Kilosa district, Tanzania	Data collection also involved direct observations of reporting and processing, assessment of report forms and reports of processed data.	Most of the health facilities (93%, 14/15) faced difficulties in submitting reports due to lack of resources and feedback from the district authority.	This study was done in another country while the current study was done in Kenya. performance of maternal health programmes in Kenyan County Governments
	Elmusharaf, Byrne & O'Donovan, 2015;	Strategies to increase demand for maternal health services in resource-limited settings: challenges to be addressed.	Design was descriptive survey design and correlational research design. Inferential statistics were Pearson's Product Moment Correlation (r) and Stepwise Regression (R^2)	The study found that the main challenges in assessing the effectiveness or efficacy of these interventions or strategies are the lack of quality evidence on their outcome and impact and interventions not integrated into existing health or community systems.	The study talked of maternal health services in general but the current study talks of county maternal health programmes

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
Stakeholders engagement in M&E and projects relationship	Banchani & Tenkorang (2014).	Implementation challenges of maternal health care in Ghana: the case of health care providers in the Tamale Metropolis	Purposive sampling was used to select study participants and qualitative strategies, including in-depth interviews, focus group discussions and review of documents employed for data collection. The study participants included midwives (24) and health managers (4) at the facility level	The study revealed inadequate in-service training, limited knowledge of health policies by midwives, increased workload, risks of infection, low motivation, inadequate labor wards, problems with transportation, and difficulties in following the procurement act, among others as some of the challenges confronting the successful implementation of the MDGs targeting maternal and child health in the Tamale Metropolis.	The study talked of challenges facing maternal health services in general but the current study talks of performance of maternal health programmes

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
	Chebet (2017)	Monitoring and evaluation drivers, type of project leadership and performance of horticulture projects supported by Kenya National Farmers Federation, Nakuru County, Kenya	Pragmatic paradigm guided the study employing Cross Sectional, Correlation descriptive survey design. The variables used were: Monitoring and evaluation drivers, type of project leadership and performance of horticulture projects.	Type of project leadership had a moderating influence on the relationship between M &E drivers and performance of horticulture projects. However the influence of type of project leadership on performance of horticulture projects on its own is not as significant as when introduced as a moderator.	Study was done in the Agriculture sector. It was also a qualitative study and therefore quantitative approaches could be used.
	Nyandika and Ngugi (2014)	Influence that stakeholders' participation has in the performance of road projects in Kenya National Highways Authority.	The study used a descriptive research design targeting a population of 251, prequalified contractors and top management.	Top management support was found critical in project performance and financial resources were found to be relevant.	The study focused on Kenya National Highways Authority but the current study looked at County Maternal Health programmes in Kenya.

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
	Lopatta, Jaeschke and Chen (2017)	Impact of stakeholder's engagement in M&E in the form of controlling shareholders on the corporate social responsibility (CSR) performance of firms using data from 25 countries.	The study used a descriptive research design	Further results show that evidence is more pronounced in countries with more stakeholders engagement in M&E.	Although time management skills were tested, the influence of M&E skills can be tested for organizational. Performance. Type of skills and level of skills of project managers to be tested in performance based systems in the current study.
	Bhattacharyya and Cummings (2015)	Measuring corporate environmental performance—stakeholders engagement in M&E evaluation.	This study undertakes CEP evaluation using an environmental performance measurement (EPM) model	Results indicate that there were multiple dimensions to measure under an organizational system as opposed to ideally a single factor.	This study was done in another country while the current study was done in Kenya.

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
	Vracheva, Judge and Madden (2016)	Enterprise strategy concept, measurement, and validation: Integrating stakeholders engagement in M&E into the firm's strategic architecture	The study used a descriptive research design	Based on computer-aided text analyses of company letters to stakeholders, study systematically identify terminology that reflects the scope and type of a firm's espoused enterprise strategy	performance of maternal health programmes in Kenyan County GovernmentsThe study is not based on the context of the health sector
	Wamalwa (2015)	Implementation challenges of free maternity services policy in Kenya: the health workers' perspective	This was a cross-sectional descriptive study carried at the Rift Valley Provincial General Hospital (RVPGH) and Bondeni maternity. All the staff who work at Bondeni Maternity (including nursing officer in-charge) were included in the study.	Major implementation challenges include inadequate supplies (86%), inadequate funding (38%), staff shortage (92%), lack of motivation among health workers (62%), overwhelming workload (89%) and abuse of services by clients (32%).	The study talked of implementation challenges facing maternal health services in general but the current study talks of performance of maternal health programmes
Capacity building for M&E and projects relationship	Nalianya (2015)	Influence of monitoring and evaluation practices on performance of non-governmental projects in Kenya. a case of Maternal Health projects in Bungoma South Sub-County, Kenya.	A descriptive survey design and correlation design was employed.	The study concluded that M&E plans have an impact on project performance, as evidenced by a fairly strong correlation of 0.607. Although human resource capacity in monitoring and	The research was on monitoring and evaluation on Performance of non-

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
				evaluation is critical to project performance, a moderate correlation coefficient of 0.530 established implies that organizations have low M&E expertise. The study also discovered that the monitoring and evaluation information system has an impact on project performance.	governmental projects. The study did not have moderating variable.
	Mugabe and Kanda (2016)	Determinants of effective Monitoring and Evaluation of strategy implementation of community-based projects, notes that poor skills in Monitoring & Evaluation affect such projects.	The study used a descriptive research design	Factors that need to be considered keenly in all the Monitoring and Evaluation activities of community-based projects so as to obtain effective outcomes from the projects.	The study did not have moderating variable The study did not address the results of behavioral determinants
	Kithinji (2019)	Evaluation capacity building (ECB) efforts and the influence of the same on general M&E practice among non-governmental organization in central eastern counties of Kenya.	The study was guided by pragmatism paradigm to conduct a descriptive survey.	The findings were that organisations in the region are doing a number of unstructured activities to build evaluation capacity which is done in varying degrees; these activities had influence on M&E practice.	Although time management skills were tested, the influence of M&E skills can be tested for organizational.p

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
					performance. Type of skills and level of skills of project managers to be tested in performance based systems
	Lennie, Tacchi, Wilmore and Koirala (2015)	Holistic, learning-centered approach to building evaluation capacity in development organizations.	A long-term, holistic, participatory, learning-centered approach that aimed to develop learning organizations and build the capacity of whole organizations and their stakeholders.	findings from this project and various follow up activities, study suggest some principles and strategies for designing and implementing an effective and sustainable approach to ECD that can help to address the many challenges and issues study have identified	This study determined to the extent to which stakeholders engagement in M&E influence performance of maternal health programmes in Kenyan County Governments.

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
	Coryell, Sailors, Nelson and Sehin (2016)	Capacity building at mid-programme: an international education development programme in Malawi	Analyses of data collected on capacity building at the midpoint of the programme are offered	The authors argue that capacity is built along the life of large programmes, and evaluating capacity building development (understanding its challenges) before the end of the programme can help cross-national teams of administrators, implementers in modifying programme operations.	This study assessed how capacity building for M&E influence performance of maternal health programmes in Kenyan County Governments.
	Kasina, 2016	Challenges facing pregnant women in accessing free maternity services: The case of level five and six hospitals in Kenya	A descriptive, exploratory research design was used in this study. The significance of the coefficients was tested at 1%, 5% and 10% significance levels. Secondary data was obtained from the Ministry of Health on staffing, facilities and deliveries in health facilities under study	From the study, results revealed that at 1% significance level, a hospital with obstetricians, ambulances, beds and presence of free maternity policy significantly increases utilization of free maternity services at levels 5 and 6 health facilities.	The study talked of pregnant women in accessing free maternity services but the current study talks of performance of county maternal health programmes
Data management for M&E and projects relationship	Obunga (2017)	An assessment of an assessment of monitoring and evaluation of plan Kenya: a case study of young health programme and adolescent	This was study employed a case study design. Purposive sampling was used to obtain respondent.	Findings were that Plan International-Kenya M&E System is a strong case worth sharing. At a 60 percent, the M&E System is partially functioning, of course	The study was a case study that used purposive sampling techniques to enumerate and

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
		girls initiative Kenya, Nairobi		with areas for improvement.	confirm monitoring and evaluation in use in Ghana. The study did not test relationship between the variables and performance.
	Ali, Powers, Beorse, Noor, Naureen, Anjum and Anderson (2016)	ODK scan: digitizing data collection and impacting data management processes in Pakistan's tuberculosis control program.	A sequential, explanatory mixed-method research approach was employed to elucidate technology use.	It was found that ODK Scan recognized 99.2% of multiple choice fill-in bubble responses and 79.4% of numerical digit responses correctly.	This study established how planning for M&E influence performance of maternal health programmes in Kenyan County Governments
	Waylen, Blackstock, Van Hulst, Damian, Horváth, Johnson and Oprina-	summarizing monitoring and evaluation for three European environmental policies in 9 cases across Europe.	These data are derived from reports and documents about monitoring programs that were publicly-available online in 2017.	The literature on M&E to support adaptive management structured the issues that have been extracted and summarized.	This study determined to the extent to which stakeholder engagement influence performance of

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
	Pavelescu (2019)				maternal health programmes in Kenyan County Governments.
	Dong, Li, Li, Jiang, Li, Yan and Li (2015)	Data issue considerations for the monitoring and evaluation of natural resources and the environment—a case study of Shangri-La County, Yunnan Province.	In this paper, an in-depth metadata analysis, based on the M&E indicator system of the NRE, is composed of two approaches and a typical practical case	The goal of this research is to explore the basic status of M&E data of one vast county-governed area in China, with the hope to improve the stability of the M&E system of the NRE at the county level.	This study determined to the extent to which stakeholder engagement influence performance of maternal health programmes in Kenyan County Governments.
	Dutta and Bose (2015)	Management of a big data project: the case of Ramco Cements Limited.	developed a new framework that can provide organizations a holistic roadmap in conceptualizing, planning and successfully implementing Big Data projects	results reveal that a clear understanding of the business problem, a detailed and well-planned step-by-step project map, a cross functional project team, adoption of innovative visualization techniques, patronage and active involvement of top management	This study assessed how capacity building for M&E influence performance of County Maternal Health Programmes in Kenya.

Variable	Author (Year)	Title of the Study	Methodology Used	Findings	Knowledge Gap
	Mwende (2015)	Influence of motivation on employee performance in non - governmental institutions: a case of Kenya Tenri society in Embu County.	The study adopted descriptive research design. The target population of the study was employees of Kenya Tenri Society, Embu County. The study was carried out by use of questionnaires which were administered to the respondents.	Findings from the study confirm that a significant association exists between employee motivation and employee performance. In conclusion, all four independent variables assessed in the study showed a significant level of association with employee performance.	The study did not have moderating variable. The study did not address the results of behavioral determinants.
	Nganga (2014)	The impact of contextual and cognitive factors on the relationship between the performance contracting system and the performance of maternal health programmes in Kenyan government Ministries	The survey was designed as a descriptive survey, and the research was conducted as a correlational study. Pearson's Product Moment Correlation (r) and Stepwise Regression were used as inferential statistics (R ²)	Financial capacity, Farm size that included land resources and access to raw materials, location, networks and unique competences and entrepreneurial effort influence firm performance	Although time management skills were tested, the influence of M&E skills can be tested for organizational performance. Type of skills and level of skills of project managers to be tested in performance based systems

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter describes the study's research methodology. It includes the paradigm, research design, target population, sample size and sampling procedure, data collection instruments, instrument validity and reliability, data collection procedures and data analysis techniques, ethical considerations, and variable operationalization.

3.2 Research Paradigm

The paradigm influences how knowledge is studied and interpreted, and its selection establishes the research's intent, motivation, and expectations (Creswell & Creswell, 2017). Pragmatism was the appropriate paradigm for this study. Pragmatism has frequently been identified as the appropriate paradigm for conducting mixed methods research in the literature on mixed methods research. For pragmatists, claimed knowledge and understanding arise from actions, situations, and consequences rather than antecedent conditions in which there is a concern with applications of what works and problem solutions (Patton, 2015). In this case, a pragmatist focused on a variety of approaches to understanding the problem. A pragmatic approach is based on abduction reasoning, which uses both induction and deduction reasoning to allow the use of qualitative and quantitative methods in the same study (Creswell & Garrett, 2015). Pragmatism is a philosophical movement that includes those who claim that an ideology or proposition is true if it works satisfactorily, that the meaning of a proposition is to be found in the practical consequences of accepting it, and that unpractical ideas are to be rejected. The pragmatism paradigm follows both positivism and interpretivism to seek the answers to the problems. Therefore, this research paradigm would suggest a mixed-method approach to research. In terms of ontology and epistemology, pragmatism is not committed to any single system of philosophy and reality. Reality is actively created as individuals act in the world, and it is thus ever changing, based on human experience, and oriented toward solving practical problems. The paradigm has the advantage of being flexible in its investigative techniques because it allows the use of both qualitative and quantitative techniques of gathering information.

3.2.1 Research Design

The study used a mix of descriptive, correlational, observational, and cross-sectional research designs. A mixed method study allows researchers to gain a more thorough knowledge of a phenomenon by combining data from multiple sources. The overall goal of mixed methods research, of combining qualitative and quantitative research components, is to expand and strengthen a study's conclusions and, therefore, contribute to the published literature. In all studies, the use of mixed methods should contribute to answering one's research questions.

The collection of designs was appropriate for boosting accuracy since it offers triangulation for comparing and contrasting quantitative and qualitative results for corroboration and validation. Quantitative data was employed to allow the study to work with a broad sample of the population, giving it statistical power to examine influence and empirical connections between variables.

3.3 Target Population

Target Population refers to the entire group of individuals or objects for whom researchers are interested in generalizing the research's conclusions, whereas the accessible population is assessed regarding the elements in the subject population inside the extent of the study. The study targeted 8 regional blocks in Kenya (Central, North Eastern, Western, Nyana, Coast, Rift Valley, Eastern and Nairobi) where one county from each block was selected using simple random sampling. However, two counties were picked from the Rift Valley block since it is large and has many counties to allow for equitable representation. The study targeted 388 hospitals from nine counties (Appendix IV). The unit of analysis was staff from level 4 and 5 hospitals (Nurses, Clinical officers, Medical officers, Nutritionists, Pharmacists, Health Records, Laboratory technologists, Counsellors, Medical superintendents, Hospital administrators, Nursing services managers and MCH in charge), County Health Management Team members, County governors/deputy governor, County Chief Officers for Health, County Executive Members for Health, County delivery unit members and Maternal health NGOs. Medical professionals from all of Kenya's regional blocks were included in the study to ensure that data on maternal health

programs could be generalized. Medical personnel were also chosen because they have experience with maternal health programs. As seen in Table 3.1, this is the case.

Table 3.1: Target Population Distribution

Category	Population	Ratio
Nurses	198	17.0
Clinical officers	113	9.7
Medical officers	65	5.6
Nutritionists	102	8.8
Pharmacists	78	6.7
Health Records	61	5.2
Laboratory technologists	142	12.2
Counsellors	67	5.8
Medical superintendents	36	3.1
Hospital administrators	36	3.1
Nursing services managers	36	3.1
MCH in charge	36	3.1
County Health Management Team members	90	7.7
County governors/deputy governor	9	0.8
County Executive Members for Health	9	0.8
County Chief Officers for Health	9	0.8
County delivery unit members	27	2.3
Maternal health NGOs	35	3.0
National MoH officers	16	1.4
Total	1165	100

3.4 Sample Size and Sampling Procedure

This section describes the study's sample size and sampling procedures.

3.4.1 Sample Size

The sample size and sampling processes utilized in this investigation are described in this section. The sample size of 282 was calculated using a simplified formula (Yamane, 1967). As shown in the formula, this formula was used to calculate the sample size.

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

Where; n is the sample size

N is the population size and

e is the margin of error.

$$N = 1165$$

$$e = 0.05$$

$$n = \frac{1165}{1 + 1165(0.05)^2}$$

$$1+1165(0.05)^2$$

$$=282$$

3.4.2 Sampling Procedure

To obtain a sample from each stratum, stratified random sampling was utilized. Because stratified random sampling ensures that small groups are represented in the sample, it was chosen. The study sample was derived from the strata generated by the categories. The development of strata was based on county authorities with ties to the health sector, who defined each stratum as a collection of units with distinct characteristics. The sample was therefore 282 as shown in Table 3.2.

Table 3.2: Sampling Design

	Population	Ratio	Sample
1. Nurses	198	0.24	48
2. Clinical officers	113	0.24	27
3. Medical officers	65	0.24	16
4. Nutritionists	102	0.24	24
5. Pharmacists	78	0.24	19
6. Health Records	61	0.24	15
7. Laboratory technologists	142	0.24	34
8. Counsellors	67	0.24	16
9. Medical superintendents	36	0.24	9
10. Hospital administrators	36	0.24	9
11. Nursing services managers	36	0.24	9
12. MCH in charge	36	0.24	9
13. CHMT members	90	0.24	22
14. County governors	9	0.24	2
15. County Executive Members for Health	9	0.24	2
16. County Chief Officers for Health	9	0.24	2
17. County delivery unit members	27	0.24	7
18. Maternal health NGOs	35	0.24	9
19. National MoH officers	16	0.24	4
Total target population	1165		282

3.5 Research Instruments

Primary data was used in this study. Data was collected using the following research instruments: a self-administered structured questionnaire, interview guides, and an observation guide. A self-administered questionnaire was used to collect quantitative data. To obtain qualitative data, interview guides and an observation checklist were employed.

3.5.1 Self-Administered Questionnaire

Medical officers, Clinical Officers, Nurses, Trained Community Health Workers, County Health Management Team (CHMT), and County Delivery Unit officers were polled using a self-administered questionnaire (see Appendix V). There were both open-ended and closed-ended questions on the questionnaire. The open-ended questions were used to urge the respondent to give an in-depth and felt response without feeling constrained in illuminating any information, whereas the closed-ended questions permitted the respondent to choose from a limited set of possibilities.

3.5.2 Interview Guides

Key informant interviews (see Appendix VI) were conducted with Medical superintendents, Hospital administrators, Nursing services managers, MCH in charge, CHMT members, County governors, County Chief Officers for Health, County Executive Members for Health, County delivery unit members, Maternal health NGOs and National MoH officers. The study sought to collect data for M&E practices and performance of county MHP. The interview was necessary to provide for triangulation of information necessary to enable for deeper understanding of performance of County MHP.

3.5.3 Observation Guide

Observation guide (see Appendix VII) was used to collect data related to study objectives. In this study, observation guide contained a list of things which needed to be observed which included coordination of activities in County Maternal Health Programmes, staff enthusiasm, record keeping and facilities. The study observed the records of the hospitals and the state of the maternal sections in terms of equipment and human resources.

3.5.4 Pilot Testing of Instruments

Pilot testing was carried out to assess the research tools' ability to gauge study concepts. During the pilot testing, 32 questionnaires were distributed at random to workers at Kenya's Ministry of Health headquarters and selected counties, representing a 10% sample size. Before administering the questionnaire to the study population, the results of the pilot test were used to refine questionnaire items. According to Burns et al. (2015), the purpose of pretesting is to learn how respondents would perceive the

questionnaire. Pretesting was crucial for determining the appropriateness of measurements and determining whether the same questions were regularly answered in the same way.

3.5.5 Validity of Research Instruments

There are three main types of validity and these are: construct validity; criterion validity; and content validity. To achieve construct validity a number of measures were done. One of the measures was to have the questionnaire evaluated by my supervisors on the appropriateness and meaning. The other measures involved obtaining opinion from a panel of experts in the field of study to ascertain as to whether constructs are being measured correctly. Principal component analysis (PCA) was used to improve construct validity or suitability of indicators, and those that were deemed to be unsuitable were excluded from further statistical analysis. The factor loading for each item also indicated whether or not the constructs were distinct from one another (Thong & Olsen, 2017). A panel of specialists also assessed the items in the instruments for appropriateness and clarity in terms of content validity. Expert advice, including that of my supervisors, as well as findings from pilot testing, were used to revise the research instrument items as needed in terms of meaning, alteration, or elimination of questions (Bowden, Fox-Rushby & Nyandieka, 2017).

3.5.6 Reliability of Research Instruments

The adoption of the split half approach on the questionnaire improved reliability. The questionnaires' usefulness to the current study was determined by determining the instrument's reliability. Burns et al. (2015) suggest that reliability testing is necessary for new questionnaires because their dependability has not been established in earlier studies. The split half approach was used to examine reliability by splitting items from the same construct into two sets and obtaining two sets from the same questionnaire. During piloting, however, the full instrument was given to a population that was identical to that in the research area. Consultations with research professionals and supervisors were used to ensure the authenticity of the qualitative instruments. Only one administration of the questionnaire to responders is required when using the split half method for reliability. The findings of the administered questionnaire test were divided into two groups using an even and odd approach. For each respondent, total scores for each half of the scores were determined. The Cronbach's Alpha coefficient

was calculated by calculating the correlation between even and odd test outcomes. The Cronbach Alpha reliability coefficient is a number that ranges from 0 to 1. Creswell (2017) considers dependability of 0.7 and higher to be sufficient. If the Cronbach Alpha reliability value is 0.7 or higher, the instrument is considered reliable. Cronbach's alpha (α), which is calculated as follows, was utilized to determine the reliability coefficient of the study instrument:

$$\alpha = \frac{k}{k-1} \times \left[1 - \frac{\sum (S^2)}{\sum S^2_{\text{sum}}} \right]$$

Where: α = Cronbach's alpha

k = Number of responses

$\sum (S^2)$ = Variance of individual items summed up

$\sum S^2_{\text{sum}}$ = Variance of summed up scores

The findings for the reliability were presented in Table 3.3.

Table 3.3: Reliability Analysis

Variable	Cronbach's Alpha	Number of items	Decision
Planning for M&E	0.915	25	Reliable
Stakeholders Engagement in M&E	0.831	25	Reliable
Capacity Building for M&E	0.773	25	Reliable
Data Management for M&E	0.819	25	Reliable
Contextual Determinants	0.892	25	Reliable
Behavioural Determinants	0.941	25	Reliable
Performance of maternal health programmes	0.909	25	Reliable
Composite Cronbach's Alpha	0.869		

From the outcomes in Table 3.3, behavioural determinants had an alpha value of 0.941, planning for M&E had an alpha value of 0.915, performance of maternal health programmes had an alpha value of 0.909, contextual determinants had an alpha value of 0.892, stakeholders engagement in M&E had an alpha value of 0.831, data management for M&E had an alpha value of 0.819 while capacity building for M&E had an alpha value of 0.773. Cronbach's alpha was 0.869 in total. Because the Cronbach's alpha coefficient was greater than 0.7, which is desirable, and less than 0.6, which is acceptable (Creswell, 2017), it was concluded that the internal consistency reliability measures used were high and adequately measured the study's

variables, and thus were considered for further analysis. The reliabilities shown above were calculated using data from a pilot study. The instrument was subsequently tweaked to include the findings of the pilot trial, which are detailed in Appendix IX. As a result, the instrument's validity and final reliability were improved.

3.6 Data Collection Procedures

The study assistants gathered primary data from medical officers, clinical officers, trained community health workers, nurses, County Health Management Team (CHMT), and County Delivery Unit officers across all counties. The study assistants utilized the drop-and-pick approach to administer the questionnaires. To avoid questionnaire loss, other surveys were done in the presence of study assistants. The researcher was assisted by well-trained research assistants in interviewing the County Governors or their deputies, County executive committee members for health (CEC health), County chief officers for health (CO health), County directors of health, the in charge of maternal health at the county level, and Maternal health NGO officials working in the region.

3.7 Data Analysis Techniques

The descriptive and inferential statistics were used in this study. Using descriptive narratives, qualitative data was evaluated within specific topics. Measures of central tendencies and measures of dispersion were used to descriptively assess quantitative data. The arithmetic mean was used to determine central tendency, whereas standard deviation was used to determine dispersion for data collected on interval and ratio scales. The standard deviation determines how strong or weak data is based on the arithmetic mean, which is a measure of central tendency.

The dependent variable which is performance of maternal health programmes in Kenyan County Governments is a single variable therefore univariate analysis was used to describe its properties. According to Bhattacharjee (2017), univariate analysis is a technique used to describe one variable. Consequently, this study used mean and standard deviation to describe performance of maternal health programmes in Kenyan County Governments.

According to Bonnett (2015), Pearson correlation is a way of knowing if two variables are related. Correlation between two variables is called bivariate correlation

(Nachmias & Nachmias, 1996). Therefore, objective one, two and three data was analyzed to establish if the independent variables monitoring and evaluation separately are correlated to Performance of County MHP. Correlation coefficient (r) obtained in each case will indicate the existence of association and the extent two variables are associated. The correlation coefficient r ranges between -1 and +1 where -1 indicates that two variables are negatively perfectly correlated and +1 indicates the two variables are positively perfectly correlated. Therefore, a negative coefficient indicates a reverse relationship between the variables and a zero value of r means the variables are not correlated. The significance of correlation was established through a nondirectional null hypothesis: $H_0: r \neq 0$. Significance testing of correlation between two variables was done using a two tailed t-test. This is in agreement with Kothari (2017) and Bhattacharjee (2017) who indicate that correlation significance is tested with one tailed t-test or two tailed t-test. If p value is less than 0.05 then the null hypotheses regarding the non-significance of r were rejected and the alternative hypothesis accepted at significance level alpha 0.05. Content analysis was used to examine the qualitative data from the open-ended questions and interviews.

3.7.1 Descriptive Analysis

In the study, questions on a likert scale were employed. These were divided into two categories: Likert item, which is used to measure a single variable, and Likert Scale, which is used to assess a simple variable using a group of items (Babbie, 2015). The data from a Likert scale can be evaluated using an interval measurement scale. The researcher creates these scales using a composite score computation (sum or mean) on a four-point or more likert scale. Hence the Likert scales composite score needs analysis as an interval scale measurement. For items with interval scales it is recommended for descriptive to be used. Additionally, analysis of data proceeding suitable for interval scales includes the Person'sy, t-test, ANOVA, and regression procedures. Bonnett (2015) suggested that Likert scales can be scaled to add additional requirements and weighed scoring to the aggregation of items into sub-scales and total scales to scores, which tends to correspond to linear and interval scale aspects of the resultant composites. To support this, Cummins (2018) stated that when adding up Likert question responses to create the data interval, all questions must utilize the same scale (5-point scale) and a defensible approximation to an interval scale must be used.

After analyzing mean scores, the composite score was utilized in analysis and decision criteria, and it was directed by the logical equal levels of the score approximated to the first decimal point in line. The following verbal anchors were used in this study: 1 = strongly disagree (SD); 2 = Disagree (D); 3 = Undecided (U); 4 = Agree (A); 5 = strongly agree (SA). As a result, the judgment rule was based on this argument: strongly disagree for values between 1 SD > 1.4, and disagree for values between 1.5 D > 2.4. For values between 2.5 U > 3.4 to undecided; Agree for values in the range of 3.5 A > 4.4. Strongly agree for values ranging from 4.5 SA > 5.0. To measure relationships, this generates a scale with an equidistance of correlations coefficient. According to the decision rule, a -value of 0.10 to 0.29 indicates a minor or weak correlation, a -value of 0.30 to 0.49 indicates a medium or moderate correlation, and a value of 0.50 to 1.0 indicates a high or strong connection. These rules apply regardless of whether the value has a negative or positive sign. The negative sign merely refers to the relationship's direction, not its strength. A variable is a set of indicators that collectively indicate a certain construct at the empirical level. Indicators can have multiple qualities (or levels), each of which represents a different value. Attribute values can be numerical (numeric) or qualitative (non-numerical) (Renn, 2017).

3.7.2 Correlation Model and Regression models

For Correlation models, Stepwise and combined Pearson correlation was conducted for the hypotheses to measure the strength of the relationships between the moderating, independent and dependent variables. For Regression Models, Stepwise regression was conducted for hypothesis one, two, three, four and five that is: Planning for M&E significantly influence performance of maternal health programmes in Kenyan County Governments; Stakeholders engagement in M&E significantly influence performance of maternal health programmes in Kenyan County Governments; Capacity building for M&E significantly influence performance of maternal health programmes in Kenyan County Governments; Data management for M&E significantly influence performance of maternal health programmes in Kenyan County Governments, Contextual determinants significantly influence performance of MHP in Kenya and Behavioral determinants significantly influence performance of County MHP Kenya. The models are as shown below:

- Y= $\beta_0 + \beta_1 X_1 + \varepsilon$ i
- Y= $\beta_0 + \beta_2 X_2 + \varepsilon$ ii
- Y= $\beta_0 + \beta_3 X_3 + \varepsilon$ iii
- Y= $\beta_0 + \beta_4 X_4 + \varepsilon$ iv
- Y= $\beta_0 + \beta_5 X_5 + \varepsilon$ v
- Y= $\beta_0 + \beta_6 X_6 + \varepsilon$ vi

Where Y= Performance of County Maternal Health Programmes

X₁ = Planning for M&E

X₂ = Stakeholders engagement in M&E

X₃ = Capacity building for M&E

X₄ = Data management for M&E

X₅ = Contextual determinants

X₆ = Behavioural Determinants

ε =Error term

Moderating Influence of Contextual Determinants

Three models were used to evaluate hypothesis eight, which stated that contextual characteristics significantly modify the relationship between M&E practices and performance of maternal health programmes in Kenya. The moderating effect of contextual variables on the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments was investigated using a stepwise regression technique using three models as is justified by steps advanced by Baron and Kenny (1986).

Step one: Influence of Monitoring and evaluation on Performance of maternal health programmes in Kenyan County Governments

In the first model, M&E practices influence on Performance of maternal health programmes in Kenyan County Governments was tested, with the equation adopted as

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

Where: Y = Performance of County Maternal Health Programmes

X₁ = Planning for M&E

X₂ = Stakeholders engagement in M&E

X₃ = Capacity building for M&E

X₄ = Data management for M&E

ε = Error term

Step Two: Influence of Contextual Determinants on Performance of maternal health programmes in Kenyan County Governments

The mathematical model used for testing the null hypothesis was as follows:

Performance of maternal health programmes = f (Contextual determinants)

$$Y = f(X_5, \varepsilon)$$

$$Y = \beta_0 + \beta_5 X_5 + \varepsilon$$

Y = Performance of maternal health programmes

β₀ = constant

β₅ = Beta coefficients

X₅ = Contextual determinants

ε = Error Term

Step three: Influence of Moderated Monitoring and evaluation by Contextual Determinants on Performance of maternal health programmes in Kenyan County Governments

Contextual determinants were introduced to the model in the second model, with the equation used as

$$Y = (\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4) * X_5 + \varepsilon$$

Where: Y = Performance of County Maternal Health Programmes in Kenya

a = Constant

β = Coefficient

X₁ = Planning for M&E

X₂ = Stakeholders engagement in M&E

X₃ = Capacity building for M&E

X₄ = Data management for M&E

X₅ = Contextual determinants

e = error term

The percentage difference in R² between the models was used to determine whether contextual determinants have a moderating effect. According to Ludwig et al. (2014), a difference between R² (Magnitude of moderation) in Model 2 and Model 3 of 0 to 0.02 indicates a very weak moderating effect, 0.02 to 0.04 indicates a weak moderating effect, 0.04 to 0.05 indicates strong moderation, and above 0.05 indicates a very strong moderating effect of contextual determinants on the relationship between M&E practices and County MH performance.

Moderating Influence of Behavioral Determinants

For hypothesis nine that behavioral determinants significantly moderate the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments was tested by use of three models. The moderating effect of behavioral determinants on the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments was investigated using a stepwise regression technique using three models as is justified by steps advanced by Baron and Kenny (1986).

Step one: Influence of Monitoring and evaluation on Performance of maternal health programmes in Kenyan County Governments

In the first model, M&E practices influence on performance of maternal health programmes in Kenyan County Governments was tested, with the equation adopted as

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

Where: Y = Performance of County Maternal Health Programmes

X_1 = Planning for M&E

X_2 = Stakeholders engagement in M&E

X_3 = Capacity building for M&E

X_4 = Data management for M&E

ε = Error term

Step two: Influence of Behavioral Determinants on Performance of maternal health programmes in Kenyan County Governments

The mathematical model used for testing the null hypothesis was as follows:

Performance of maternal health programmes = f (Behavioral determinants)

$$Y = f(X_6, \varepsilon)$$

$$Y = \beta_0 + \beta_6 X_6 + \varepsilon$$

Y = Performance of maternal health programmes

β_0 = constant

β_5 = Beta coefficients

X_6 = Behavioral determinants

ε = Error Term

Step three: Influence of Moderated Monitoring and evaluation by Behavioral Determinants on Performance of maternal health programmes in Kenyan County Governments

In the third model, Behavioural Determinants was introduced to the model with the equation adopted as

$$Y = (\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4) * X_6 + \varepsilon$$

Where: Y = Performance of County Maternal Health Programmes in Kenya

a = Constant

β = Coefficient

X₁ = Planning for M&E

X₂ = Stakeholders engagement in M&E

X₃ = Capacity building for M&E

X₄ = Data management for M&E

X₆ = Behavioral determinants

The percentage change in R² between the models was used to determine if indep variables and behavioral determinants have a moderating effect. According to Coryell et al. (2016), a difference between R² (Magnitude of moderation) in Model 2 and Model 3 of 0 to 0.02 indicates a very weak moderating effect, 0.02 to 0.04 indicates a weak moderating effect, 0.04 to 0.05 indicates strong moderation, and above 0.05 indicates a very strong moderating effect of contextual and behavioral determinants on the relationship between M&E practice.

3.7.3 Summary Statistical Tests of Hypotheses

The strength of the independent variables in terms of their link with the dependent variable was tested using regression models. Because the population of the study was 475, F-statistics were utilized to test the hypothesis. A correlation coefficient, abbreviated as r, measures the strength of the relationship between the independent and dependent variables. To find the value of r, use the formula below;

$$r = \frac{\sum(dx dy)}{N} - \frac{(\sum dx)(\sum dy)}{N}$$

r is always between -1 and 1 inclusive. -1 means perfect negative linear correlation and +1 means perfect positive linear correlation.

The strength of the independent variables in terms of their link with the dependent variable was tested using regression models. The coefficient of determination was used to estimate the impact of each of the initiation process, monitoring and evaluation procedures, and moderating of contextual influences on the performance of maternal health programmes in Kenya. To test the hypothesis, F statistics were used. Hypotheses were tested in order to arrive at objective results. Table 3.3 lists the research objectives, study hypotheses, and type of analysis to be performed.

Table 3. 4: Statistical Tests of Hypotheses

Study Objectives	Study Hypotheses	Tools of Analysis	Reject /Accept
Objective 1: To establish how planning for M&E influence performance of County Maternal Health Programmes in Kenya	H1: Planning for M&E significantly influence performance of County Maternal Health Programmes in Kenya	Pearson's Moment Correlation r R ² Stepwise Regression Significance Test: Z- test	Reject when Sig values are less than 0.05.
Objective 2: To determine to what extent stakeholders engagement in M&E influence performance of County Maternal Health Programmes in Kenya.	H2: Stakeholder engagement significantly influences performance of County Maternal Health Programmes in Kenya.	Pearson's Moment Correlation r R ² stepwise Regression Significance Test: Z- test	Reject when Sig values are less than 0.05.
Objective 3: To assess how capacity building for M&E influence performance of County Maternal Health Programmes in Kenya.	H3: Capacity building for M&E significantly influence performance of County Maternal Health Programmes in Kenya.	Pearson's Moment Correlation r R ² Bivariate Regression Significance Test: Z- test	Reject when Sig values is less than 0.05.M&E
Objective 4: To assess how Data management for M&E influence performance of County Maternal Health Programmes in Kenya.	H3: Data management for M&E significantly influences performance of County Maternal Health Programmes in Kenya.	Pearson's Moment Correlation r R ² Bivariate Regression Significance Test: Z- test	Reject when Sig values is less than 0.05.M&E.
Objective 5: To establish how contextual determinants influence performance of County Maternal Health Programmes in Kenya.	H4: Contextual determinants significantly influence performance of County Maternal Health Programmes in Kenya.	Pearson's Moment Correlation r R ² Bivariate Regression Significance Test: Z- test	Reject when Sig values are less than 0.05.

Study Objectives	Study Hypotheses	Tools of Analysis	Reject /Accept
Objective 6: To determine how behavioral determinants influence performance of County Maternal Health Programmes in Kenya.	H5: Behavioral determinants significantly influence performance of County Maternal Health Programmes in Kenya.	Pearson's Moment Correlation r R^2 Bivariate Regression Significance Test: Z- test	Reject when Sig values are less than 0.05.
Objective 7: To examine the moderating influence of contextual determinants on link amid M&E practices and performance of maternal health programmes in Kenyan County Governments.	H6: Contextual determinants significantly moderate the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments.	Hierarchical multiple regression (change in R^2)	Reject when Sig values are less than 0.05.
Objective 8: To establish the moderating influence of behavioral determinants on relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya.	H7: Behavioral determinants significantly moderate the relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya.	Hierarchical multiple regression (change in R^2)	Reject when Sig values are less than 0.05.
Objective 9: To assess the combined monitoring and evaluation practices influence performance of County Maternal Health Programmes in Kenya.	H8: Combined monitoring and evaluation practices influence performance of County Maternal Health Programmes in Kenya.	Hierarchical multiple regression (change in R^2)	Reject when Sig values are less than 0.05.

3.8 Ethical Consideration

In this study, confidentiality by way of non-disclosure of participant's names or institutions was offered to participating institutions and respondents. This allowed access to the study report without compromising identities of respondents (Nachmias & Nachmias, 1996). Furthermore, all participants were informed of their freedom to withdraw from the study at any time and without penalty by filling out a permission form. There were no coaxing of participants and informed consent was sought from

participants. In addition, the researcher sought ethical approval from government institutions such as the National Commission for Science, Technology and Innovation (NACOSTI) to authenticate the study. On request, the institutions and participants received a summary of the study's final report. Throughout the research process, ethical norms in the constitutional rights of every person were observed, and informed consent was obtained from respondents, who were assured of the confidentiality of the data and information to be collected.

3.9 Operationalization of the Variables

Table 3.4 indicates the operational definition of variables which includes their respective indicators, measurement, research design and type of statistical analysis.

Table 3.5: Operationalization of the Variables

Objectives	Variable	Indicators	Measurement Scale	Data analysis Techniques	Tool of Data Analysis
Establish the influence of planning for M&E on performance of County Maternal Health Programme in Kenya	Planning for M&E	<ul style="list-style-type: none"> • Resource allocation for M&E • Resource mobilization/funding • Budgeting • M&E Work plans/ M&E Framework • M&E policy • Strategic planning in support of M&E 	Ordinal Nominal Interval	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ inferential statistics 	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ Pearson's Correlation analysis ➤ Regression analysis
Determine the influence of stakeholder engagement on performance of County Maternal Health Programme in Kenya.	Stakeholder engagement	<ul style="list-style-type: none"> • Advocacy to promote M&E • Stakeholder identification • Stakeholder analysis • Communication • Collaborations/partnerships • Community participation 	Interval Nominal Ratio Ordinal	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ inferential statistics 	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ Pearson's Correlation analysis ➤ Regression analysis
Assess the influence of Capacity building for M&E on performance of County Maternal Health Programme in Kenya.	Capacity building for M&E	<ul style="list-style-type: none"> • Technical expertise in M&E • Training and supervision • M&E workforce development plan • M&E champions • Surveillance system • IT capacity 	Ordinal Interval	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ inferential statistics 	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ Pearson's Correlation ➤ Descriptive statistics ➤ inferential statistics ➤ n analysis

					➤ Regression analysis
Assess the influence of Data management for M&E on performance of County Maternal Health Programme in Kenya.	Data management for M&E	<ul style="list-style-type: none"> • Routine data collection • Data analysis & auditing • Data dissemination • Data Use in decision making 	Ordinal Interval	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ inferential statistics 	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ Pearson's Correlation analysis ➤ Regression analysis
Examine the moderating influence of contextual determinants on relationship between monitoring and evaluation practices and performance of County Maternal Health Programme in Kenya.	Contextual determinants	<ul style="list-style-type: none"> • Communication processes • Resources Adequacy/Financial capacity • IT complexity • Organizational culture • Organizational strategy • Management support • Organizational structure/ M&E Structure • Organizational size & capacity 	Ratio Nominal interval Ordinal	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ inferential statistics 	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ Pearson's Correlation analysis ➤ Regression analysis
Establish the moderating influence of human determinants on relationship between monitoring and evaluation practices and performance of County Maternal Health Programme in Kenya.	Behavioral determinants	<ul style="list-style-type: none"> • Implementer's knowledge and attitude • Implementer M&E skills • Stakeholders participation • Political leadership • Implementers' motivation 	Ordinal Nominal	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ inferential statistics 	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ Pearson's Correlation analysis ➤ Regression analysis

	Performance of County Maternal Health programmes	<ul style="list-style-type: none"> • Service quality levels • Achievement of result indicators • Level of customer satisfaction • Level of employee satisfaction • Cost within budget • Timeliness 	Interval Ratio Nominal	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ inferential statistics 	<ul style="list-style-type: none"> ➤ Descriptive statistics ➤ Regression analysis
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CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter is divided into sections that cover the analysis of data acquired on the subject under investigation, its presentation (in tables with means, standard deviations, frequencies, and percentages), and its interpretation (in prose). The findings are presented in this chapter by first looking at the response rate, demographic characteristics, and objectives. The researcher presented tables that summarized the respondents' collective reactions in order to make the talks easier to follow. It discusses the features of the respondents, their opinions on the moderating influence of contextual and behavioral determinants on the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments.

4.2 Return Rate

The study sample was 198 participants for questionnaires and 84 respondents for interviews. The outcomes are illustrated in Table 4.1.

Table 4.1: Return Rate

Category of sampled population	Sample	Return Rate	Percentage
Questionnaires	198	163	82.3
Interviews	84	72	85.7
Total	282	235	83.3

Table 4.1 demonstrates that out of the 198 sample for the questionnaires (County Maternal Health Program Staff), 163 responded to the questionnaires giving a response rate of 82.3%. Also there were 72 out of the sampled 84 interviewees reached (Medical superintendents, Hospital administrators, Nursing services managers, MCH in charge, CHMT members, County governors, CEM for Health, CCO for Health, County delivery unit members, maternal health NGOs and National MoH officers). This gave a response rate of 85.7%. The overall response rate for the study was 83.3% which is within what Yin (2017) recommended that an above 70% response rate is suitable for the study.

4.3 Background Information of Respondents

The study sought to establish the background information of the participants by examining their gender, age bracket, religious affiliation, and highest level of education, number of years in the county maternal health programmes, profession and sections they covered. This was of great importance since it informs the nature of responses obtained.

4.3.1 Distribution of Respondent by Gender

The study sought to establish the gender of the respondents who participated in the study. The respondents were hence asked to indicate their gender. The purpose was to establish the gender distribution of those who took part in the study. The outcomes are shown in Table 4.2.

Table 4.2: Gender of the Respondent

	Frequency	Percent
Male	46	28.3
Female	115	70.5
Intersex	2	1.2
Total	163	100.0

As per Table 4.2, 70.5% of the respondents were female, 28.3% were male while 1.2% were intersex. Because the majority of the County Maternal Health programs were female, the study acquired more information from female respondents. The fact that various gender participants contributed to the responses, it improved the quality of the results. This study was guided by pragmatism paradigm therefore by having male, female and intersex responses incorporated, it enhanced the aspect of multiple realities.

4.3.2 Distribution of Respondent by Age Bracket

The study further sought to establish the age bracket of the respondents who had taken part in the study. Hence the respondents were required in the questionnaire to indicate their age bracket. This was very important for the study as it implicated whether the respondents were mature enough to respond to questions on the study matter. Their findings are recorded in Table 4.3.

Table 4.3: Age Bracket of the Respondent

	Frequency	Percent
18-25 years.	21	12.9
26-35 years.	62	38.0
36-45 years.	48	29.4
Above 45 years.	32	19.6
Total	163	100.0

The outcomes in Table 4.3 reveal that 38.0% of the participants were aged between 26-35 years, 29.4% were aged 36-45 years, 19.6% were aged above 45 years, and 12.9% were aged between 18-25 years. The results demonstrate that County Maternal Health programmes are mainly run by mature citizens. However, in this study, it implies that majority of respondents are largely aware of issues in maternal health and performance. It also implies that the respondents were mature and could responsibly respond to the questions on the research problem.

4.3.3 Distribution of Respondent by Religious Affiliation

Further, the study sought to establish the religious affiliation that the respondents have been involved in the construction industry. Hence the respondents were required in the questionnaire to indicate religious affiliation they have been involved in. The purpose of this was to establish how experienced the respondents were and their familiarity with spirituality. The findings were as presented in Table 4.4.

Table 4.4: Religious Affiliation of the Respondent

	Frequency	Percent
Christians	77	47.2
Muslim	46	28.2
Hindu	27	16.6
Non-Religious	8	4.9
Others	5	3.1
Total	163	100.0

From the outcomes Table 4.4, 47.2% of the participants indicated that they were Christians, 28.2% indicated that they were Muslims, 16.6% indicated that they were Hindus, 4.9% indicated that they were nonreligious, while 3.1% noted that they had other religious affiliations. This implied that the majority of participants were

Christians. Moreover, the researcher sought this information to gain insights into the religious factors that influence the choices of the respondents.

4.3.4 Distribution of Respondent by Highest Level of Academic Qualifications

The study also intended to determine the greatest level of education among those who took part in the survey. As a result, respondents were obliged to specify their highest level of schooling on the questionnaire. This was crucial for the research since it determined how respondents would answer to questions and how well they understood monitoring and evaluation processes. Their findings are presented on Table 4.5.

Table 4.5: Highest Level of Academic Qualifications of the Respondent

	Frequency	Percent
Secondary School	1	0.6
Certificate	25	15.2
Diploma	89	54.3
Degree	28	17.1
Masters	18	11.0
PHD	3	1.8
Total	163	100.0

The result outcomess in Table 4.5 demonstrated that 54.3% of the participants had reached the Diploma level, 17.1% had reached the Degree level, 15.2% had reached the Certificate level, 11.0% had reached the Masters level, 1.8% had reached the PHD level, and 0.6% had reached the Secondary School level. This implies that all the respondents had adequate academic qualifications to participate in data collection of the study. Also having adequate and high academic qualifications made the respondents to be in a position to give accurate information about the moderating influence of contextual and behavioral determinants on the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments due to their adequate and excellent academic levels.

4.3.5 Distribution of Respondent by Number of Years in the Maternal Health Programmes

Further, the study sought to establish the number of years the respondents have been involved in the Maternal Health Programmes. Hence, the respondents were required in the questionnaire to indicate number of years they have been involved in the Maternal Health Programmes. The purpose of this was to establish how experienced

the respondents were and their familiarity with Maternal Health Programmes. Table 4.6 shows the outcomes.

Table 4.6: Number of Years in the County Maternal Health Programmes

	Frequency	Percent
Less than 2 years	22	13.5
Between 2 and 4 years	74	45.4
More than 5 years	67	41.1
Total	163	100.0

From the outcomes in Table 4.6, 45.4% of the participants noted that they have been working with County Maternal Health Programmes for between 2 and 4 years, 41.1% indicated for more than 5 years, while 13.5% indicated for less than 2 years. This shows that many of the participants had participated in County Maternal Health programmes for long enough to be able to give accurate information in relation to the moderating influence of contextual and behavioral determinants on the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments. This implies that they could all provide quality responses to the questionnaire due to vast experience in maternal health.

4.3.6 Distribution of Respondent by Profession

Further, the study sought to establish the respondents' profession. Hence, the respondents were required in the questionnaire to indicate respondents' profession. The purpose of this was to establish whether the respondents were involved in the Maternal Health Programmes. The study determines to establish respondents' profession. The findings are as presented on Table 4.7.

Table 4.7: Profession of the Respondent

	Frequency	Percent
Nurse	40	24.5
Clinical Officer	23	14.1
Medical officer	13	8.0
Nutritionist	19	11.7
Lab tech	27	16.6
Pharmacist	15	9.2
Health Records	12	7.4
Counselor	14	8.6
Total	163	100.0

From the outcomes in Table 4.7, 24.5% of the participants were nurses, 16.6% were lab techs, 14.1% were clinical officers, 8% were medical officers, 11.7% were nutritionists, 9.2% were pharmacists, 8.6% were counselors, while 7.6% were health recorders. This means participants that all the respondents in the study had a role to play in County MHP in their respective hospitals and thus they were able to give reliable data on the subject matter.

4.3.7 Distribution of Respondent by Sections they Cover

Moreover, the study sought to establish the sections that they covered in the County Maternal Health programmes. Hence, the respondents were required in the questionnaire to indicate sections that they covered in the County Maternal Health programmes. The purpose of this was to establish whether the respondents were involved in the Maternal Health Programmes. Their results are recorded in Table 4.8.

Table 4.8: Distribution of Respondent by Sections they cover

	Yes		No	
	Frequency	Percent	Frequency	Percent
ANC	88	54.0	75	46.0
Growth monitoring/Child welfare	43	26.4	120	73.6
Immunization	46	28.2	117	71.8
PMTCT	59	36.2	104	63.8
Counseling	64	39.3	99	60.7
Nutrition	29	17.8	134	82.2
Health Records	12	7.4	151	92.6
Phlebotomy	27	16.6	136	83.4
Pharmacy	15	9.2	148	90.8

The outcomes in Table 4.8 revealed that 54.0% of the respondents indicated that they covered ANC, 26.4% indicated growth monitoring/child welfare, 28.2% indicated immunization, 36.2% indicated PMTCT, 39.3% indicated counseling, 17.8% indicated nutrition, 7.4% indicated health records, 16.6% indicated phlebotomy, while 9.2% indicated pharmacy. This implies that the respondents covered different sections dealing with MCH and hence could give credible data on the moderating influence of contextual and behavioral determinants on the relationship between practices of M&E and performance of maternal health programmes in Kenyan County Governments.

4.4 Basic Tests for Statistical Assumptions

Diagnostic tests for evaluating regression assumptions are described in this section. Normality, heteroscedasticity, autocorrelation, multicollinearity, and sampling adequacy are some of the tests used. The assumptions about the original data must be made before a comprehensive regression analysis can be undertaken (Antonakis & Deitz, 2018). When assumptions are not met, the results might lead to Type I or Type II errors, as well as an over- or underestimation of significance (Osborne & Waters, 2017).

4.4.1 Normality Test

The Kolmogorov Smirnov test and the Shapiro Wilk test were used to test for normality in this investigation. The results of normality testing are shown in Table 4.9.

Table 4.9: Checking for Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Planning for M&E	0.183	162	0.021	0.907	162	0.610
Stakeholders engagement in M&E	0.171	162	0.016	0.902	162	0.530
Capacity building for M&E	0.172	162	0.009	0.812	162	0.080
Data management for M&E	0.138	162	0.011	0.917	162	0.262
Contextual determinants	0.111	162	0.023	0.931	162	0.171
Behavioral determinants	0.116	162	0.003	0.921	162	0.211
Performance of County Maternal Health Programmes	0.139	162	0.017	0.872	162	0.439

As shown in Table 4.9, the p-value for both tests of normality, the Kolmogorov Smirnov test and the Shapiro-Wilk tests, is more than 0.05, indicating that the study rejected H_0 and concluded that data on both the response and predictor factors were distributed normally, which aids in the prediction of dependent variables. The data is considered normal if the Shapiro-Wilk Test's Significance score is greater than 0.05, according to Park (2015). If it's less than 0.05, the data deviates significantly from a normal spread.

4.4.2 Heteroscedasticity

This test determines if the dependent variable's variance varies over the data (test the assumption of equal variance). The Levene test was performed to check for

heteroscedasticity, with a P-value of 0.05 indicating the presence of non-uniform variance. Table 4.10 shows the outcomes of the tests.

Table 4.10: Levene Test Results

	Levene Statistic	Df 1	Df2	Sig.
Planning for M&E	0.183	1	162	0.021
Stakeholders engagement in M&E	2.171	1	162	0.014
Capacity building for M&E	3.172	1	162	0.031
Data management for M&E	4.238	1	162	0.003
Contextual determinants	1.211	1	162	0.047
Behavioral determinants	3.122	1	162	0.002
Performance of County Maternal Health Programmes	2.331	1	162	0.034

From the findings presented in Table 4.10, the p-value for all the variables (planning for M&E, engagement of stakeholders capacity building, data management E, contextual determinants, behavioral determinants and performance of County MHP) were below 0.05 so the null hypotheses for equal variances was rejected. This further demonstrates that the data set is homoscedastic and so suited for regression equation modeling.

4.4.3 Autocorrelation Test

The errors are said to be 'serially correlated' if they are correlated with one another. As a result, this assumption was put to the test. The first test was Durbin-Watson, which is displayed in the model's regression output. Table 4.11 shows the outcomes of the Autocorrelation Test.

Table 4.11: Autocorrelation Test

Model	Durbin-Watson
1	2.008 ^a

The Durbin Watson statistic, according to Bhattacharjee (2017), is a value that is always between 0 and 4 and tests for autocorrelation in the residuals from a statistical regression study. A score of 2 shows that the sample has no autocorrelation. Positive autocorrelation is indicated by values around 0; negative autocorrelation is indicated by values near 4. According to the data in Table 4.11, the model's Durbin-Watson value was 2.008. As a result, the null hypotheses for the model were rejected, and autocorrelation was not a concern.

4.4.4 Test for Multicollinearity

Collinearity diagnostics were used to calculate the Variance Inflation Factor (VIF) value and tolerance thresholds in order to ascertain if multicollinearity levels would offer a challenge to data processing. When the independent variables are not independent of one other, multi-collinearity occurs. The assumption of collinearity (sometimes known as multi-collinearity) is that the independent variables are uncorrelated (Keith, 2018). When numerous independent variables have a high level of correlation with each other, or when one predictor variable is a near linear combination of other independent variables, multi-collinearity arises. Collinearity Statistics were used to see if the independent variables were sufficiently correlated to establish a significant causal correlation. Table 4.12 shows the results of the multicollinearity test.

Table 4.12: Collinearity Statistics

	Collinearity Statistics	
	Tolerance	VIF
Planning for M&E	0.927	1.079
Stakeholders engagement in M&E	0.466	2.146
Capacity building for M&E	0.603	1.658
Data management for M&E	0.638	1.567
Contextual determinants	0.776	1.289
Behavioral determinants	0.825	1.212

Outcomes in Table 4.12 show that, on the basis of the coefficients output, planning for M&E had a VIF value of 1.079, stakeholders engagement in M&E had a VIF value of 2.146, capacity building for M&E had a VIF value of 1.658, capacity building for M&E had a VIF value of 1.567, contextual determinants had VIF value of 1.289 and behavioural determinants VIF value of 1.212. The values for VIF for all variables were below 10 and the tolerance was more than 0.1, indicating that there were no multicollinearity signs as Bryman (2017) suggested.

4.4.5 Sampling Adequacy

This test was carried out to see if there was an acceptable level of sampling adequacy. The test was conducted using Bartlett's sphericity test and the Kaiser-Meyer-Olkin (KMO) test, with a test result of 0.5 or higher indicating that the data is suitable for regression analysis. The Bartlett's Test of Sphericity was used to determine if the

samples were drawn from populations with equal variances. Table 4.13 shows the outcomes of the tests.

Table 4.13: Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

Factors	KMO Test	Bartlett's Test of Sphericity			Determinant
		Approx. Chi-Square	Df	Sig.	
Planning for M&E	0.802	510.767	162	0.001	0.034
Stakeholdersengagement in M&E	0.759	382.052	162	0.000	0.186
Capacity building for M&E	0.825	622.734	162	0.002	0.006
Data management for M&E	0.853	848.875	162	0.010	0.242
Contextual determinants	0.867	786.123	162	0.000	0.175
Behavioral determinants	0.822	418.362	162	0.007	0.241
Performance of maternal health programmes	0.781	656.712	162	0.006	0.236

Table 4.13 shows that Bartlett's test significances were less than 0.05 (p < 0.1), indicating that sampling adequacy was adequate (sample is factorable). In addition, all of the variables' KMO statistics were greater than 0.5 (planning for M&E (0.802), engagement of stakeholders (0.759), capacity building (0.825), data management (0.853), contextual determinants (0.867), behavioural determinants (0.822) and performance of County MHP (0.781). This means that the data was appropriate for regression analysis.

4.4.6 Control of Type I Error and Type II Error

When certain assumptions regarding the variables utilized in the analysis are not met, Type I or Type II errors arise, resulting in untrustworthy conclusions. According to Osborne and Waters (2017), removing univariate and bivariate outliers can lower the likelihood of Type I and Type II mistakes while also improving estimate accuracy. The SPSS software was used to accomplish this. Making a measuring inaccuracy is quite dangerous. Unreliable measurement leads relationships to be under-estimated in simple correlation and regression, raising the probability of Type II errors. If the covariate is not correctly assessed, the effect of magnitude of other variables can be overestimated in multiple regression or partial correlation. Correction of low reliability was carried out in the current study, yielding a composite Cronbach alpha of 0.852, ensuring a true depiction of the relationship between the variables and avoiding

overestimation during multiple regressions. In data testing, 95 percent confidence levels and a significance level of 0.05 were used. A Type II error means not rejecting the null hypothesis when it is actually false. This is not quite the same as “accepting” the null hypothesis, because hypothesis testing can only tell you whether to reject the null hypothesis.

4.4.7 Analysis of Likert Type Data

The Likert scale questions were used in seven sections of the questionnaire. The scales utilized were 5-point Likert scales with 5 being strongly agree, 4 being agree, 3 being neutral, 2 being disagree, and 1 being strongly disagree. Strongly Agree (SA) varies between 4.5 and 5.0; Agree (A) ranges between 3.5 and 4.5; Neutral (N) ranges between 2.6 and 3.4; Disagree (D) ranges between 1.8 and 2.6; and Strongly Disagree (SD) ranges between 1 and 1.7, according to Zikmund, Babin, Carr, and Griffin (2017).

Descriptive statistics on study variables comprised of planning for M&E, engagement of stakeholder in M&E, capacity building for M&E, data management for M&E, contextual determinants, behavioral determinants and performance of County MHP. The mean and standard deviations were then used to present descriptive statistics. The participants were asked to rate how much they agreed or disagreed with sentences that described the various variables. The items were graded on a 5-point Likert scale, with 5 denoting strong agree, 4 denoting agree, 3 denoting neutral, 2 denoting disagree, and 1 denoting strongly disagree.

4.5 Performance of maternal health programmes

In this study, performance of MHP was the response variable. Using the questionnaire, data was gathered by asking respondents to rate how much they agreed or disagreed with various statements concerning the quality of care and service delivery, achievement of maternal health indicators, achievement of child health indicators, level of patient & employee satisfaction, and operational efficiency.

4.5.1 Quality of Care and Service Delivery

The respondents were required to indicate their level of agreement with the statements on the quality of care and service delivery in their county using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly

agree. The questionnaire had five statements linked to quality of care and service delivery. Their outcomes are presented on Table 4.14.

Table 4.14: Quality of Care and Service Delivery

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
Staff is responsive and willing to help patients and provide prompt service to requests, questions or complaints.	18 (11.0)	0 (0.0)	0 (0.0)	63 (38.7)	82 (50.3)	4.172	0.715
Employees inspire trust and confidence by ensuring confidentiality of patient information.	20 (12.3)	22 (13.5)	33 (20.2)	46 (28.2)	42 (25.8)	3.417	0.832
The physical layout, tools, machines and the facilities are not clean and customer friendly.	20 (12.3)	21 (12.9)	26 (16.0)	52 (31.9)	44 (27.0)	3.485	0.840
We are reliable, performing the promised services dependably and accurately paying attention to the results.	13 (8.0)	5 (3.1)	0 (0.0)	66 (40.5)	79 (48.5)	4.184	0.640
Our staff are empathetic, caring, paying personal attention, and providing individualized services to customers.	18 (11.0)	0 (0.0)	10 (6.1)	53 (32.5)	82 (50.3)	4.110	0.747

Sub-composite	3.874	0.755
Mean and Standard deviation		

Table 4.14 shows the results from the statement that staff is responsive and willing to help patients and provide prompt service to requests, questions or complaints. The mean score was 4.172 which was above sub-overall mean of 3.874 meaning that the staff is responsive and willing to help patients and provide prompt service to requests, questions or complaints. The std.dev was 0.715 which was below the sub-overall std.dev (0.755) which implies that the opinions converged.

Further, employees inspire trust and confidence by ensuring confidentiality of patient information. The mean score was 3.417 and std.dev was 0.832. The item had a mean score lower than the overall mean of 3.874 meaning that employees do not inspire trust and confidence by ensuring confidentiality of patient information. Further, the standard deviation was above the sub-composite std.dev (0.755) meaning that the views were inconsistent.

Regarding the statement that the physical layout, tools, machines and the facilities are not clean and customer friendly. The mean score was 3.485 and std.dev was 0.840. The item had a mean score lower than the compound mean of 3.874 implying that the physical layout, tools, machines and the facilities are clean and customer friendly. Also, the standard deviation was above the sub-overall std.dev (0.755) suggesting that the views were inconsistent.

Further, the staff are reliable, performing the promised services dependably and accurately paying attention to the results. The mean score was 4.184 and std.dev was 0.640. The item had a mean score above the composite mean of 3.874 implying that the staff is reliable, performing the promised services dependably and accurately paying attention to the results. Further, the std.dev was below the sub-composite std.dev (0.755) meaning that the views converged.

On the statement that staff is empathetic, caring, paying personal attention, and providing individualized services to customers. The mean score was 4.110 and std.dev was 0.747. The item had a mean score above the composite mean of 3.874 implying that staff is empathetic, caring, paying personal attention, and providing individualized

services to customers. Moreover, the std.dev was lower than the sub-overall std.dev (0.755) inferring that the views converged.

4.5.2 Achievement of Maternal Health Indicators

The participants were needed to indicate their level of agreement with the statements on the achievement of maternal health indicators in their county using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. Their findings are presented on Table 4.15.

Table 4.15: Achievement of Maternal Health Indicators

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
Maternal mortality rate is low.	0 (0.0)	0 (0.0)	0 (0.0)	60 (36.8)	103 (63.2)	4.632	0.984
The practice of exclusive breastfeeding for six months is high.	17 (10.4)	22 (13.5)	10 (6.1)	40 (24.5)	74 (45.4)	3.810	0.903
Proportion of demand for family planning services is high.	17 (10.4)	1 (0.6)	0 (0.0)	71 (43.6)	74 (45.4)	4.129	0.687
Antenatal and postnatal care coverage is high.	0 (0.0)	0 (0.0)	0 (0.0)	70 (42.9)	93 (57.1)	4.571	0.997
Proportion of births assisted by qualified health staff is low.	21 (12.9)	28 (17.2)	30 (18.4)	78 (47.9)	6 (3.7)	3.123	0.643
Sub-composite Mean and Standard deviation						4.053	0.843

Table 4.15 reveals that in regard to the statement that maternal mortality rate is low. The mean score was 4.632 and std.dev was 0.984. The item had a mean score above

the composite mean 4.053 implying that maternal mortality rate is low. The std.dev was above the sub-composite std.dev implying that the views were inconsistent.

Further, the practice of exclusive breastfeeding for six months is high. The mean score was 3.810 and std.dev was 0.903. The item had a mean score lower than the overall mean of 4.053 meaning that the practice of exclusive breastfeeding for six months was low. Further, the std.dev was more than the sub-composite std.dev implying that the views were varying.

On the statement that proportion of demand for family planning services is high. The mean score was 4.129 and std.dev was 0.687. The item had a mean score above the overall mean of 4.053 inferring that the proportion of demand for family planning services is high. Further, the std.dev was below the sub-overall std.dev of 0.843 meaning that the views converged.

On the statement that antenatal and postnatal care coverage is high. The mean score was 4.571 and std.dev was 0.997. The item had a mean score above the composite mean of 4.053 implying that antenatal and postnatal care coverage is high. Also, the std.dev was above the sub-composite std.dev of 0.843 implying that the views were varying.

It was noted that the proportion of births assisted by qualified health staff is low. The mean score was 3.123 and standard deviation was 0.643. The item had a mean score was below the overall mean of 4.053 meaning that proportion of births assisted by qualified health staff was high. Further, the std.dev was lower than the sub-overall std.dev of 0.843 suggesting that the views converged.

4.5.3 Achievement of Child Health Indicators

The participants were needed to indicate their level of agreement with the statements on the achievement of child health indicators in their county using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. Their findings are demonstrated on Table 4.16.

Table 4.16: Achievement of Child Health Indicators

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
Full child immunization coverage is low.	26 (16.0)	31 (19.0)	25 (15.3)	81 (49.7)	0 (0.0)	2.988	0.655
PMTCT ARV prophylaxis rate for infant and mother is high	26 (16.0)	21 (12.9)	31 (19.0)	68 (41.7)	17 (10.4)	3.178	0.757
The under-five mortality rate is low.	0 (0.0)	0 (0.0)	0 (0.0)	62 (38.0)	101 (62.0)	4.620	0.987
Vitamin A supplementation coverage is high.	23 (14.1)	26 (16.0)	26 (16.0)	85 (52.1)	3 (1.8)	3.117	0.646
Proportion of children who are stunted is low.	0 (0.0)	0 (0.0)	0 (0.0)	74 (45.4)	89 (54.6)	4.546	0.999
Sub-composite Mean and Standard deviation						3.690	0.809

Table 4.16 presents findings on the achievement of child health indicators in their county. Regarding the statement that full child immunization coverage is low. The mean score was 2.988 and std.dev was 0.655. The item had a mean score lower than the total mean of 3.690 implying that full child immunization coverage was high. Further, the std.dev was below the sub-overall std.dev of 0.809 inferring that the views converged.

On the statement that the PMTCT ARV prophylaxis rate for infant and mother is high. The mean value was 3.178 and std.dev was 0.757. The item had a mean score was below the total mean of 3.690 meaning that the PMTCT ARV prophylaxis rate for infant and mother was low. Further, the std.dev was below the sub-overall std.dev of 0.809 suggesting that the views converged.

Further, the under-five mortality rate is low had a mean score above the composite mean of 3.690 implying that the under-five mortality rate is low. Further, the std.dev was more than the sub-composite std.dev of 0.809 implying that the views were inconsistent.

On the statement that Vitamin A supplementation coverage is high, the mean value was 3.117 and std.dev was 0.646. The item had a mean score lower than the total mean of 3.690 implying that Vitamin A supplementation coverage was low. Further, the std.dev was below the sub-overall std.dev of 0.809 meaning that the views converged.

Regarding the statement that the children proportion who are stunted is low, the mean score was 4.546 and std.dev was 0.999. The item had a mean score above the total mean of 3.690 suggesting that proportion of children who are stunted is low. Further, the std.dev was above the sub-overall std.dev of 0.809 suggesting that the views were inconsistent.

4.5.4 Level of Patient and Employee Satisfaction

The participants were needed to indicate their level of agreement with the statements on the level of patient and employee satisfaction in their county using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. Their findings are presented on Table 4.17.

Table 4.17: Level of Patient & Employee Satisfaction

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
There is low employee turnover	3 (1.8)	2 (1.2)	3 (1.8)	3 (1.8)	152 (93.3)	4.834	0.687
Our patients are contented with our services.	24 (14.7)	18 (11.0)	24 (14.7)	22 (13.5)	75 (46.0)	3.650	0.505
I am satisfied as an employee in our department.	36 (22.1)	20 (12.3)	27 (16.6)	20 (12.3)	60 (36.8)	3.295	0.591

Service delivery to customers is not effective in our department.	30 (18.4)	26 (16.0)	24 (14.7)	29 (17.8)	54 (33.1)	3.313	0.522
Patients take a lot of time to be served and discharged.	32 (19.6)	30 (18.4)	22 (13.5)	28 (17.2)	51 (31.3)	3.221	0.536
Sub-composite Mean and Standard deviation						3.663	0.568

According to Table 4.17 on the level of patient & employee satisfaction, on the statement that there is low employee turnover, the mean value was 4.834 and std.dev was 0.687. The item had a mean score above the composite mean of 3.663 suggesting that there is low employee turnover. Further, the std.dev was above the sub-composite std.dev of 0.568 meaning that the views were inconsistent.

On the statement that the patients are contented with the services, the mean score was 3.650 and std.dev was 0.505. The item had a mean score lower than the total mean of 3.663 suggesting that the patients are not contented with the services. Further, the std.dev was below the sub-overall std.dev of 0.568 meaning that the views converged.

On the statement that the staff is satisfied as an employee in the department, the mean score was 3.295 and std.dev was 0.591. The item had a mean score lower than the total mean of 3.663 suggesting that the staff is not satisfied as employees in the department. Further, the std.dev was above the sub-overall of 0.568 meaning that the views were inconsistent.

About service delivery to customers is not effective in the department, the mean score was 3.313 and std.dev was 0.522. The item had a mean value lower than the total mean of 3.663 implying that service delivery to customers is effective in the department. Further, the std.dev was below the sub-overall std.dev of 0.568 meaning that the opinions converged.

Regarding the statement that patients take a lot of time to be served and discharged, the mean score was 3.221 and std.dev was 0.536. The item had a mean score below the total mean of 3.663 meaning that patients did not take a lot of time to be served

and discharged. Further, the std.dev was lower than the sub-overall std.dev of 0.568 meaning that the views converged.

4.5.5 Operational Efficiency

The participants were needed to indicate their level of agreement with the statements on the operational efficiency in their county using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. Their findings are presented on Table 4.18.

Table 4.18: Operational Efficiency

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
We have adequate healthcare providers in our department.	28 (17.2)	23 (14.1)	26 (16.0)	22 (13.5)	64 (39.3)	3.436	0.536
Activities are performed in the timelines established	23 (14.1)	31 (19.0)	29 (17.8)	17 (10.4)	63 (38.7)	3.405	0.502
Our maternal health program is cost efficient- budget utilized as planned.	19 (11.7)	19 (11.7)	23 (14.1)	23 (14.1)	79 (48.5)	3.761	0.948
Materials such as forms, printing papers, registers, PPE materials are always available.	22 (13.5)	30 (18.4)	20 (12.3)	29 (17.8)	62 (38.0)	3.485	0.984
There is frequent shortages of essential supplies and commodities for patients care	9 (5.5)	11 (6.7)	11 (6.7)	15 (9.2)	117 (71.8)	4.350	0.699
Sub-composite mean and standard deviation						3.687	0.734

Table 4.18 presents findings on level of agreement with the statements on the operational efficiency in their county. On the statement that the staff have adequate healthcare providers in the department, the mean value was 3.436 and std.dev was 0.536. The item had a mean score below the total mean of 3.687 meaning that the staff did not have adequate healthcare providers in the department. Further, the std.dev was below the sub-composite std.dev of 0.734 implying that the opinions converged.

About activities are performed in the timelines established, the mean score was 3.405 and std.dev was 0.502. The item had a mean score below the overall mean of 3.687 suggesting that activities are not performed in the timelines established. Further, the std.dev was lower than the sub-overall std.dev of 0.734 meaning that the views converged.

Regarding the maternal health program is cost efficient budget utilized as planned, the mean score was 3.761 and std.dev was 0.948. The item had a mean score above the composite mean of 3.687 implying that the maternal health program is the cost efficient budget utilized as planned. Further, the std.dev was above the sub-overall std.dev of 0.734 suggesting that the thoughts were inconsistent.

Regarding the statement that materials such as forms, printing papers, registers, PPE materials are always available, the mean value was 3.485 and std.dev was 0.984. The item had a mean score below the composite mean of 3.687 implying that materials such as forms, printing papers, registers, and PPE materials are not always available. Further, the std.dev was above the sub-overall std.dev of 0.734 meaning that the views were inconsistent.

On the statement that there are frequent shortages of essential supplies and commodities for patients care, the mean score was 4.350 and std.dev was 0.699. The item had a mean score above the composite mean of 3.687 implying that there are frequent shortages of essential supplies and commodities for patients care. Further, the std.dev was below the sub-overall std.dev of 0.734 meaning that the views converged.

4.5.6 Overall Descriptive Analysis of Performance of maternal health programmes

Performance of county MHP was considered in terms of quality of care and service delivery, achievement of maternal health indicators, achievement of child health

indicators, level of patient & employee satisfaction, and operational efficiency. The overall mean and std.dev of these elements are demonstrated in Table 4.19.

Table 4.19: Means and Standard Deviations of Performance of maternal health programmes

Variable Dimension/Indicator	Sub-Composite Mean (M)	Sub-composite Std. Dev.
Quality of care and service delivery	3.874	0.755
Achievement of maternal health indicators	4.053	0.843
Achievement of child health indicators	3.690	0.809
Level of patient & employee satisfaction	3.663	0.568
Operational efficiency	3.687	0.734
Composite Mean and standard deviation	3.793	0.742

Outcomes in Table 4.19 demonstrate that the total mean of performance of maternal health programmes was 3.793. The most dominant indicator was achievement of maternal health indicators (m=4.053). This is attributed to the low maternal mortality rate, high demand for family planning services, high antenatal and postnatal care coverage and high proportion of births assisted by qualified health staff. On the contrary, the practice of exclusive breastfeeding for six months was low. The views on this indicator were inconsistent since the sub overall std.dev (0.843) was above the overall std.dev of 0.742.

The second best indicator was quality of care and service delivery (M=3.874) whereby the study revealed that the staff was responsive and willing to help patients and provide prompt service to requests, questions or complaints, the staff was reliable, performing the promised services dependably and accurately paying attention to the results, and the staff was empathetic, caring, paying personal attention, providing individualized services to customers, and physical layout, tools, machines and the facilities are clean and customer friendly. The study however noted that employees do not inspire trust and confidence by ensuring confidentiality of patient information. Most of the views on this indicator were diverging since the sub overall std.dev (0.755) was above the overall std.dev of 0.742.

On the indicator, achievement of child health indicators (M=3.690) was not met because the PMTCT ARV prophylaxis rate for infant and mother and vitamin A supplementation coverage was low. However, full child immunization coverage was

high, under-five mortality rate was low, and proportion of children who are stunted was low. Views on this dimension diverged given the sub overall std.dev (0.809) was above the overall std.dev of 0.742.

Operational efficiency (M=3.687) was not met because there were frequent shortages of essential supplies and commodities for patients care, materials such as forms, printing papers, registers, PPE materials were not always available, the activities were not performed in the timelines established, and the staff did not have adequate healthcare providers in the department. However, the maternal health program is the cost efficient-budget utilized as planned. There was consistency of views on this dimension since the sub composite std.dev was 0.734 was below the overall std.dev of 0.742.

Finally, the level of patient & employee satisfaction (M=3.663) was low because the staff were not satisfied as employees in the department, and the patients were not contented with the services. However, patients did not take a lot of time to be served and discharged, service delivery to customers was effective in the department, and there was low employee turnover. Views on this dimension converged given the sub overall std.dev (0.568) was below the overall std.dev of 0.742.

From the observation guide, the respondents strongly agreed that there was a customer service desk, presence of documents indicating procurement in County Maternal Health Programmes, some of the operations were computerized and there was a suggestion box for all County Maternal Health Programmes. The respondents agreed that they observed that all staff are enthusiastic about their work, there were leaflets given indicating the mission and vision of the County Maternal Health Programmes, there is good record keeping for the programme, the vision and mission were clearly stated, there is good coordination of activities in County Maternal Health Programmes, the staff were polite and welcoming, and the facilities were in good shape and functional.

The respondents were neutral on whether they observed that the clients were happy with the services offered, there were staff vehicles that were operational, there were beneficiaries of the programmes unattended to, and the building floors and wall were

not in level. The respondents did not observe that the building environment was untidy and had stagnant water.

4.6 Planning for M&E and Performance of Maternal Health

Programmes

This section dealt with the first objective the study which sought to establish how planning for M&E influences performance of maternal health programmes in Kenyan County Governments. Planning for M&E was assessed by budgeting, resource mobilization & allocation, M&E frameworks, M&E work plans, M&E policy, and strategic in support of M&E.

4.6.1 Budgeting, Resource Mobilization & Allocation and Performance of County MHP

This section shows descriptive analysis on how budgeting, resource mobilization & allocation in the planning for M&E influences performance of County MHP. The respondents were needed to indicate their level of agreement with the statements on budgeting, resource mobilization & allocation in relation to performance of the county MHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are as shown on Table 4.20.

Table 4.20: Budgeting, Resource Mobilization & Allocation and Performance of County MHP

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
There is an M&E unit/department/section	0 (0.0)	0 (0.0)	0 (0.0)	68 (41.7)	95 (58.3)	4.583	0.495
There is clear adequate budgetary allocation for M&E	0 (0.0)	0 (0.0)	2 (1.2)	81 (49.7)	80 (49.1)	4.479	0.525
Adequate M&E infrastructure for M&E programming does not exist.	26 (16.0)	19 (11.7)	27 (16.6)	70 (42.9)	21 (12.9)	3.252	0.283

There are organized resource mobilization activities for supporting M&E planning.	0 (0.0)	0 (0.0)	0 (0.0)	68 (41.7)	95 (58.3)	4.583	0.495
The program applies for donor funding to supporting our maternal health program	24 (14.7)	31 (19.0)	28 (17.2)	69 (42.3)	11 (6.7)	3.074	0.215
Sub-composite Mean and Standard deviation						3.994	0.403

Table 4.20 reveals the results on how budgeting, resource mobilization & allocation influences performance of maternal health programmes in Kenyan County Governments. On the statement that there is an M&E unit/department/section, the mean was 4.583 and std.dev was 0.495. The item had a mean score was more than the overall mean of 3.994 suggesting that there was an M&E unit/department/section. Further, the std.dev was above the sub-overall std.dev of 0.403 inferring that the views were inconsistent.

About that there is clear adequate budgetary allocation for M&E, the mean was 4.479 and std.dev was 0.525. The item had a mean score above the composite mean of 3.994 implying that there is clear adequate budgetary allocation for M&E. Further, the std.dev was above the sub-overall std.dev of 0.403 suggesting that the view were inconsistent.

Further, on the statement that adequate M&E infrastructure for M&E programming does not exist, the mean was 3.252 and std.dev was 0.283. The item had a mean value lower than the overall mean of 3.994 implying that adequate M&E infrastructure for M&E programming exists. Further, the std.dev was lower than the sub-overall std.dev of 0.403 inferring that the views converged.

On the statement that there are organized resource mobilization activities for supporting M&E planning, the mean was 4.583 and std.dev was 0.495. The item had a mean score above the overall mean of 3.994 implying that there are organized

resource mobilization activities for supporting M&E planning. Further, the std.dev was above the sub-overall std.dev of 0.403 meaning that the views were inconsistent.

On the statement that the program applies for donor funding to supporting the maternal health program, the mean was 3.074 and std.dev was 0.215. The item had a mean score lower than the overall mean of 3.994 implying that the program does not apply for donor funding to supporting the maternal health program. Further, the std.dev was lower than the sub-overall std.dev of 0.403 meaning that the views converged.

4.6.2 M&E Frameworks and Performance of maternal health programmes

This section shows descriptive analysis on how M&E frameworks in the planning for M&E influences performance of County MHP. The respondents were asked to indicate their level of agreement with the statements on M&E frameworks in relation to performance of the county MHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are as shown on Table 4.21.

Table 4.21: M&E Frameworks and Performance of maternal health programmes

	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Dev.
Program managers (or M&E specialists) are prepared to design tools, instruments, and methodologies required to gather the needed information.	21 (12.9)	26 (16.0)	27 (16.6)	84 (51.5)	5 (3.1)	3.160	0.138
Theory of Change framework for our maternal health program does not exists.	0 (0.0)	0 (0.0)	0 (0.0)	69 (42.3)	94 (57.7)	4.577	0.496

Logical Framework to monitor our maternal health programs implementation exists	0 (0.0)	0 (0.0)	0 (0.0)	67 (41.1)	96 (58.9)	4.589	0.494
Results Framework to provide clarity around our key program objectives does not exist.	0 (0.0)	0 (0.0)	0 (0.0)	69 (42.3)	94 (57.7)	4.577	0.496
We understand the political and administrative structures of the community where our maternal programs take place.	29 (17.8)	23 (14.1)	27 (16.6)	78 (47.9)	6 (3.7)	3.055	0.218
Sub-composite Mean and Standard deviation						3.992	0.368

Table 4.21 reveals that on the statement that program managers (or M&E specialists) are ready to create the tools, equipment, and techniques needed to collect the data, the mean was 3.160 and std.dev was 0.138. The item had a mean value overall lower than the composite mean of 3.992 implying that program managers (or M&E specialists) are ready to create the tools, equipment, and techniques needed to collect the data. Further, the std.dev was below the sub-overall std.dev of 0.368 inferring that the views converged.

On the statement that whether the theory of change framework for the maternal health program does not exist, the mean was 4.577 and std.dev was 0.496. The item had a mean score above the composite mean of 3.992 implying that Theory of Change framework for the maternal health program does not exist. Further, the std.dev was above the sub-overall std.dev of 0.368 inferring that the views were inconsistent.

On the statement that whether the logical framework to monitor the maternal health programs implementation exists, the mean was 4.589 and std.dev was 0.494. The item had a mean score above the composite mean of 3.992 implying that the logical

framework to monitor the maternal health programs implementation exists. Further, the std.dev was above the sub-overall std.dev of 0.368 suggesting that the views were inconsistent.

Regarding the statement on whether the results framework to provide clarity around the key program objectives does not exist, the mean was 4.577 and std.dev was 0.496. The item had a mean score above the composite mean of 3.992 implying that the results framework to provide clarity around the key program objectives does not exist. Further, the std.dev was above the sub-overall std.dev of 0.368 suggesting that the views were inconsistent.

On the statement that the staff understands the structures for politics and administration of the community where the maternal programs take place, the mean was 3.055 and std.dev was 0.218. The item had a mean score below the composite mean of 3.992 meaning that the staff does not understand the structures for politics and administration of the community where the maternal programs take place. Further, the std.dev was lower than the sub-composite std.dev of 0.368 meaning that the views converged.

4.6.3 M&E Work Plans and Performance of County MHP

This section shows descriptive analysis on how M&E work plans in the planning for M&E influences performance of County MHP. The participants were required to indicate their level of agreement with the statements on M&E work plans in relation to performance of the county MHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are as shown on Table 4.22.

Table 4.22: M&E Work Plans and Performance of County MHP

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
There are no standardized reporting forms for use by those delivering same maternal health services.	0 (0.0)	0 (0.0)	0 (0.0)	70 (42.9)	93 (57.1)	4.571	0.497
We have a detailed design of the maternal health program implementation plan.	0 (0.0)	0 (0.0)	0 (0.0)	68 (41.7)	95 (58.3)	4.583	0.495
Annual Work Plans to guide our activities are prepared.	7 (4.3)	22 (13.5)	23 (14.1)	70 (42.9)	41 (25.2)	3.712	0.115
Participatory planning is not used when preparing our work plans.	24 (14.7)	31 (19.0)	33 (20.2)	75 (46.0)	0 (0.0)	2.976	0.116
Possible risks and unanticipated circumstances that may arise during program execution are identified.	28 (17.2)	24 (14.7)	31 (19.0)	71 (43.6)	9 (5.5)	3.055	0.223
Sub-composite Mean and Standard deviation						3.779	0.289

Table 4.22 revealed that on the statement that there are no standardized reporting forms for use by those delivering same maternal health services, the mean was 4.571 and std.dev was 0.497. The item had a mean score above the composite mean of 3.779 implying that there are no standardized reporting forms for use by those delivering same maternal health services. Further, the std.dev was greater than the sub-composite std.dev of 0.289 suggesting that the views were inconsistent.

On the statement that the staff have a detailed design of the maternal health program implementation plan, the mean was 4.583 and std.dev was 0.495. The item had a mean score above the composite mean of 3.779 implying that the staff has a detailed design of the maternal health program implementation plan. Further, the std.dev was more than sub-overall std.dev of 0.289 inferring that the views were inconsistent.

From the statement on whether annual work plans to guide the activities are prepared, the mean was 3.712 and std.dev was 0.115. The item had a mean value lower than the overall mean of 3.779 meaning that annual work plans to guide the activities are prepared. Further, the std.dev was below the sub-overall std.dev of 0.289 meaning that the views converged.

As per the statement that participatory planning is not used when preparing the work plans, the mean was 2.976 and std.dev was 0.116. The item had a mean value lower than the overall mean of 3.779 meaning that participatory planning is used when preparing the work plans. Further, the std.dev was lower than the sub-overall std.dev of 0.289 meaning that the opinions converged.

On the statement that during the implementation of the program, potential risks and unforeseen scenarios are identified, the mean was 3.055 and std.dev was 0.223. The item had a mean value lower than the overall mean of 3.779 implying that possible risks and unforeseen situations that might arise during program execution are not identified. Further, the std.dev was lower than the sub-overall std.dev of 0.289 inferring that the views converged.

4.6.4 M&E Policy and Performance of maternal health programmes

This section shows descriptive analysis on how M&E policy in the planning for M&E influences performance of County MHP. The respondents were required to indicate their level of agreement with the statements on M&E policy in relation to performance of the county MHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are as shown on Table 4.23.

Table 4.23: M&E Policy and Performance of maternal health programmes

	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Dev.
An M&E policy/framework exists that guides M&E activities.	101 (62.0)	9 (5.5)	10 (6.1)	3 (1.8)	40 (24.5)	2.215	0.713
Roles and responsibilities of maternal health program staff and stakeholders are clearly defined.	12 (7.4)	6 (3.7)	14 (8.6)	14 (8.6)	117 (71.8)	4.337	0.728
I do not know the UN sustainable development goal (SDGs), the targets and indicators on maternal health.	12 (7.4)	14 (8.6)	11 (6.7)	13 (8.0)	113 (69.3)	4.233	0.813
M&E components and strategies are included in the county maternal health policy	16 (9.8)	20 (12.3)	16 (9.8)	23 (14.1)	88 (54.0)	3.902	0.920
I'm confident with the county planning for M&E activities.	19 (11.7)	13 (8.0)	17 (10.4)	17 (10.4)	97 (59.5)	3.982	0.942
Sub-composite Mean and Standard deviation						3.734	0.823

Results in Table 4.23 relate to M&E policy and performance of maternal health programmes. On the statement that an M&E policy/framework exists that guides M&E activities, the mean was 2.215 and std.dev was 0.713. The item had a mean value lower than the overall mean of 3.734 implying that an M&E policy/framework does not exist that guides M&E activities. Further, the std.dev was lower than the sub-overall std.dev of 0.823 meaning that the views converged.

On the statement that roles and responsibilities of maternal health program staff and stakeholders are clearly defined, the mean was 4.337 and std.dev was 0.728. The item had a mean score above the composite mean of 3.734 implying that roles and responsibilities of maternal health program staff and stakeholders are clearly defined. Further, the std.dev was below the sub-composite std.dev of 0.823 meaning that the views converged.

About whether the staff does not know the UN sustainable development goal (SDGs), the targets and indicators on maternal health, the mean was 4.233 and std.dev was 0.813. The item had a mean score above the composite mean of 3.734 implying that the staff does not know the UN sustainable development goal (SDGs), the targets and indicators on maternal health. Further, the std.dev was below the sub-overall std.dev of 0.823 inferring that the views converged.

On the item M&E components and strategies are included in the county maternal health policy, the mean was 3.902 and std.dev was 0.920. The item had a mean score above the composite mean of 3.734 implying that M&E components and strategies are included in the county maternal health policy. Further, the std.dev was above the sub-overall std.dev of 0.823 denoting that the views were inconsistent.

On the statement that the staff was confident with the county planning for M&E activities, the mean was 3.982 and std.dev was 0.942. The item had a mean score above the composite mean of 3.734 meaning that the staff was confident with the county planning for M&E activities. Further, the std.dev was above the sub-overall std.dev of 0.823 implying that the opinions were inconsistent.

4.6.5 Strategic Planning in Support of M&E and Performance of maternal health programmes

This section shows descriptive analysis on how strategic planning in support of M&E in the planning for M&E influences performance of County MHP. The respondents were required to indicate their level of agreement with the statements on strategic planning in support of M&E in relation to performance of the county MHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are as shown on Table 4.24.

Table 4.24: Strategic Planning in Support of M&E and Performance of County MHP

	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Dev.
We have clear maternal health objectives, mission & vision	18 (11.0)	16 (9.8)	31 (19.0)	16 (9.8)	82 (50.3)	3.785	0.930
A county health sector strategic plan which has M&E component does not exist.	3 (1.8)	3 (1.8)	69 (42.3)	3 (1.8)	85 (52.1)	4.006	0.591
There are short-term and long-term county maternal health targets	16 (9.8)	14 (8.6)	16 (9.8)	10 (6.1)	107 (65.6)	4.092	0.909
We have a clear sustainability plan for our maternal health interventions	10 (6.1)	19 (11.7)	10 (6.1)	10 (6.1)	114 (69.9)	4.221	0.819
Our MCH program is not well aligned with the Kenya health strategic priorities and the sustainable development goals.	1 (0.6)	1 (0.6)	45 (27.6)	112 (68.7)	4 (2.5)	3.718	0.550
Sub-composite mean and standard deviation						3.964	0.760

The findings in Table 4.24 relate to strategic planning in support of M&E and performance of County MHP. On the statement that the programs have clear maternal health objectives, mission & vision, the mean was 3.785 and std.dev was 0.930. The item had a mean score lower than the overall mean of 3.964 meaning that the programs do not have clear maternal health objectives, mission & vision. Further, the std.dev was above the sub-overall std.dev of 0.760 denoting that the views were inconsistent.

On the statement that a county health sector strategic plan which has M&E component does not exist, the mean was 4.006 and std.dev was 0.591. The item had a mean score above the composite mean of 3.964 implying that the county health sector strategic plan which has M&E component does not exist. Further, the std.dev was below the sub-overall std.dev of 0.760 implying that the views converged.

Regarding that there are short-term and long-term county maternal health targets, the mean was 4.092 and std.dev was 0.909. The item had a mean score above the composite mean of 3.964 implying that there are short-term and long-term county maternal health targets. Further, the std.dev was above the sub-composite std.dev of 0.760 meaning that the views were varying.

About the programs have a clear sustainability plan for the maternal health interventions, the mean was 4.221 and std.dev was 0.819. The item had a mean score above the composite mean of 3.964 implying that the programs have a clear sustainability plan for the maternal health interventions. Further, the standard deviation was above the sub-overall std.dev of 0.760 denoting that the views were inconsistent.

Regarding the statement that the MCH program is not well aligned with the Kenya health strategic priorities and the sustainable development goals, the mean was 3.718 and std.dev was 0.550. The item had a mean score lower than the overall mean of 3.964 denoting that the MCH program is well aligned with the Kenya health strategic priorities and the sustainable development goals. Further, the std.dev was below the sub-overall std.dev of 0.760 meaning that the views converged.

4.6.6 Overall Descriptive Analysis of Planning for M&E

Planning for M&E was considered in terms of budgeting, resource mobilization & allocation, M&E frameworks, M&E work plans, M&E policy, and strategic in support of M&E. The outcomes are shown in Table 4.25.

Table 4.25: Means and Standard Deviations of Planning for M&E

Variable Dimension/Indicator	Sub-Composite Mean (M)	Sub-composite Std. Dev.
Budgeting, Resource Mobilization & Allocation	3.994	0.403
M&E Frameworks	3.992	0.368
M&E Work Plans	3.779	0.289
M&E Policy	3.734	0.823
Strategic Planning in Support of M&E	3.964	0.760
Composite Mean and standard deviation	3.893	0.529

Outcomes in Table 4.25 demonstrate that the general mean of planning for M&E was 3.893. The most dominant factor was budgeting, resource mobilization & allocation (m=3.994). This is attributed to the presence of an M&E unit/department/section, clear adequate budgetary allocation for M&E, adequate M&E infrastructure for M&E programming, and organized resource mobilization activities for supporting M&E planning. On the contrary, the program does not apply for donor funding to supporting the maternal health program. The views on this indicator were consistent because the sub overall std.dev (0.403) was below the overall std.dev of 0.529.

The second-best indicator was M&E frameworks (M=3.992) whereby the study revealed that the logical framework to monitor the maternal health programs implementation exists. The study however noted that the results framework to give clarity around the primary program goals does not exist since the staff does not comprehend the political and administrative institutions of the community where the maternity programs take place, the Theory of Change framework for the maternal health program does not exist, and program managers are not ready to design instruments, tools, and methodologies required to obtain the needed data. Most of the views on this indicator were converging since the sub overall std.dev of 0.368 was lower than the composite std.dev of 0.529.

Strategic planning in support of M&E (M=3.964) was achieved because there are short-term and long-term county maternal health targets, the programs have a clear sustainability plan for the maternal health interventions, and the MCH program is well aligned with the Kenya health strategic priorities and the sustainable development

goals. However, the county health sector strategic plan which has M&E component does not exist, and the programs do not have clear maternal health objectives, mission & vision. Views on this dimension diverged given the sub overall std.dev of 0.760 was above the overall std.dev of 0.529.

M&E work plans (M=3.779) were not met because there were no standardized reporting forms for use by those delivering same maternal health services, and possible risks and unanticipated situations that might arise during program implementation were not identified. However, participatory planning is used when preparing the work plans, annual work plans to guide the activities are prepared, and the staff has a detailed design of the maternal health program implementation plan. There was consistency of views on this dimension since the sub overall std.dev of 0.289 was below the overall std.dev of 0.529.

Finally, the M&E policy (M=3.734) was not achieved because an M&E policy/framework does not exist that guides M&E activities, the staff does not know the UN sustainable development goal (SDGs), the targets and indicators on maternal health. However, the staff was confident with the county planning for M&E activities, M&E components and strategies are included in the county maternal health policy, and roles and responsibilities of maternal health program staff and stakeholders are clearly defined. Views on this dimension converged given the sub overall std.dev of 0.823 was above the overall std.dev of 0.529.

4.6.7 Correlation between Planning for M&E and Performance of maternal health programmes

The purpose of the analysis was to determine the direction and size of the relationship between the investigated predictor and response variables. This was in keeping with the study's primary goal, which was to determine how M&E planning affects the performance of Kenya's County Maternal Health Programs. Table 4.26 shows the outcomes of the data collected from the respondents.

Table 4.26: Correlation between Planning for M&E and Performance of County MHP

		Planning for M&E
Performance of maternal health programmes	Pearson Correlation	0.859
	Sig. (2-tailed)	.023

Table 4.26 indicate strong correlation between the performance of county MHP and planning for M&E whose $r=0.859$ which meant that planning for M&E was significant since and $p=0.023<0.05$. There was therefore a strong correlation between the performance of county MHP and planning for M&E.

4.6.8 Regression Analysis of Influence of Planning for M&E on Performance of County MHP

Further, a linear regression analysis was used to find out the extent to which M&E planning effects the success of Kenyan county maternal health programs. Similarly, data was obtained from respondents in order to test its hypothesis, and the composite index for each of the planning for M&E indicators was generated and employed in the analysis. The following hypothesis, which was in keeping with the first aim, was developed and put to the test.

4.6.8.1 Hypothesis Testing

To meet the first objective, the following hypothesis was investigated using a simple regression model.

H_a : Planning for M&E significantly influences performance of maternal health programmes in Kenyan County Governments

H_0 : Planning for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments

Regression Model

The null hypothesis was tested using the following mathematical model:

Performance of County MHP = f (Planning for M&E)

$$Y = f(X_1, \varepsilon)$$

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where

Y = Performance of County Maternal Health Programmes

X1 = Planning for M&E

β_0 = Constant term

β_1 = Beta coefficient

ε = Error term

Data was analyzed and the regression outcomes for the influence of planning for M&E on Performance of maternal health programmes in Kenyan County Governments are presented in Table 4.27.

Table 4.27: Planning for M&E and Performance of maternal health programmes

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	0.859	0.737	0.736	1.346		
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	818.029	1	818.029	451.764	1.37E-48
	Residual	291.53	161	1.811		
Total		1109.559	162			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.897	0.198		4.530	.000
	Planning for M&E	0.889	0.143	0.859	6.217	.000
Predictors: (constant), Planning for M&E						
Dependent Variable: Performance of maternal health programmes						

Table 4.27 outcomes that $r=0.859$. This demonstrates that planning for M&E has a strong link with performance of maternal health programmes in Kenyan County Governments. $R^2 = 0.737$ showing that planning for M&E explains 73.7% of the variations in the performance of maternal health programmes in Kenyan County Governments. The overall F statistics, ($F = 451.764$, $p < 1.37E-48 < 0.05$), indicated that there was a statistically significant relationship between planning for M&E and

performance of maternal health programmes in Kenyan County Governments. As a result, the study rejected null hypothesis, and it was found that M&E planning has a considerable impact on the performance of Kenyan county maternal health programs.

4.6.9 Findings from Qualitative Information

Upon seeking the interviewees' opinions on what plans they had for monitoring and evaluation at the county and specifically in maternal health. The key informants indicated that they catered for installation of systems to produce appropriate data and reporting for material data, put up all systems in accurate and good working conditions to enable or allow clear data reporting, made sure that all systems are working per the data required to be filled, improved teamwork and co-ordination among stakeholders, review employee performance and structural processes related to HR, co-ordinated CHW (Community Health Workers) activities within the subcounty, made sure that there is accurate operation or good working conditions of systems, proper data collection and analysis, improved data quality, accuracy and completeness in documentation, error free/minimal in reports, put up systems for accurate data capture and reporting for maternal health data, and collect, analyze and disseminate data. One county chief officer for health noted:

“Ensure that all the data is captured as per the guidelines and used for informing future planning and improvement of the services. Further, to prevent unwanted pregnancies and resulting complications, we need to increase the use of modern contraceptive methods by women of reproductive age, with emphasis on adolescents. We also need to increase the number of skilled personnel in health facilities with specific expertise in preconception, antenatal, childbirth, and postpartum care”

The NGO officers were also required to indicate how resources are mobilized for monitoring and evaluation activities. They indicated that the resources were allocated by gathering information and assessment in order to meet the desired goals, through use of indicators of tracking processes and progress within each public sector departments, and efficiency in delivery and performance is the policy statement. The county delivery unit members added that the resources were mobilized by having a budget for random monitoring, supervir checks and reviews y the county M&E

departments. Further, they indicated that resource mobilization was through county monitoring and evaluation support programs, and the county government. The County Executive Members for Health also indicated that they prepared M&E work plans, M&E frameworks and budgeting. One hospital administrator indicated:

“Each county and sub-country executive outlines M&E budget in their annual budgetary statements. The coordinating committee reviews and allocates. The problem is that it requires huge resources and without continuous donor support it is difficult to implement by national governments. We have sought for Community-based advocacy groups to lobby for resources”

The researcher further required to know whether monitoring and evaluation is included in the strategic planning process. The CHMT members indicated that they did. They added that monitoring and evaluation was included by rendering out what the county has done to help in decision making. Also, in order to measure their performance and talk progress towards achieving desired goals, communicating decisions in the maternal health program, and resource required including manpower is included in the budget (yearly). One medical superintendent contradicted said:

“No it is part of the strategic planning review process. These systems are often too simplistic and concentrate on managing activities and output results or too complicated. Most monitoring and evaluation systems have failed to provide scalable solutions to aggregate results regularly.”

Another said:

“Yes, but there is always a gap in follow up. Some indicators are not fully explored to the later. Monitoring and evaluation helps with identifying the most valuable and efficient use of resources. Monitoring and evaluation together provide the necessary data to guide strategic planning, to design and implement programmes and projects, and to allocate, and re-allocate resources in better ways.”

Moreover, the MCH in charge was required to state whether needs assessment, feasibility studies and baseline studies are carried out before implementation of

programs. The MCH in charge indicated that they did and that throughout the times due to lack of adequate supply of enough or required skills, there is a goodwill administration of county integrated M/E system, and private research /individual institutions are always conducted for feasibility and baseline assessment studies.

4.7 Stakeholder Engagement for M&E and Performance of County

MHP

This section covered objective two of the study which sought to determine to the extent to which stakeholders engagement in M&E influence performance of maternal health programmes in Kenyan County Governments. Stakeholder Engagement for M&E was assessed by advocacy to promote M&E, stakeholder identification & analysis, stakeholder communication, collaborations, and community participation.

4.7.1 Advocacy to Promote M&E and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements on advocacy to promote M&E in relation to performance of the county MHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.28.

Table 4.28: Stakeholder Engagement for M&E and Performance of maternal health programmes

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
There are people who strongly advocate for and support M&E within the county	21 (12.9)	26 (16.0)	34 (20.9)	80 (49.1)	2 (1.2)	3.098	0.601
There's a maternal health M&E Technical Working Group (TWG)/committee at the county.	12 (7.4)	10 (6.1)	6 (3.7)	63 (38.7)	72 (44.2)	4.061	0.680

The maternal health TWG/ committee at the county does not meet regularly	0 (0.0)	0 (0.0)	0 (0.0)	72 (44.2)	91 (55.8)	4.558	0.998
I'm not confident with the county M&E stakeholders management plans & practices	0 (0.0)	0 (0.0)	0 (0.0)	73 (44.8)	90 (55.2)	4.552	0.999
We receive M&E mentorship from the national MoH M&E teams	18 (11.0)	23 (14.1)	26 (16.0)	47 (28.8)	49 (30.1)	3.528	0.844
Sub-composite Mean and Standard deviation						3.959	0.824

As per the findings in Table 4.28, on the statement that there are individuals who strongly advocate for and support M&E within the county, the average was 3.098 and std.dev was 0.601. The item had a mean value lower than the cm of 3.959 implying that there are individuals who strongly do not advocate for and support M&E within the county. Further, the std.dev was smaller than the sub-overall std.dev of 0.824 meaning that the views converged.

On the statement that there's a maternal health M&E Technical Working Group (TWG) /committee at the county, the average was 4.061 and standard deviation was 0.680. The item had a mean score above the composite mean of 3.959 meaning that there's a maternal health M&E Technical Working Group (TWG) /committee at the county. Further, the std.dev was below the sub-overall std.dev of 0.824 meaning that the views converged.

Regarding the statement that the maternal health TWG/ committee at the county does not meet regularly, the average was 4.558 and std.dev was 0.998. The item had a mean

score above the composite mean of 3.959 implying that the maternal health TWG/committee at the county does not meet regularly. Further, the std.dev was above the sub-overallv std.dev of 0.824 implying that the views were inconsistent.

On the statement that the staff is not confident with the county M&E stakeholders' management plans & practices, the average was 4.552 and std.dev was 0.999. The item had a mean score above the composite mean of 3.959 implying that the staff is not confident with the county M&E stakeholders' management plans & practices. Further, the std.dev was above the sub-overall std.dev of 0.824 inferring that the views were inconsistent.

On the statement that the staff receive M&E mentorship from the national MoH M&E teams, the average was 3.528 and std.dev was 0.844. The item had a mean score lower than the cm of 3.959 implying that the staff does not receive M&E mentorship from the national MoH M&E teams. Further, the std.dev was above the sub-composite std.dev of 0.824 meaning that the views were inconsistent.

4.7.2 Stakeholder Identification & Analysis and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements on stakeholder identification & analysis in relation to performance of the county MHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are tabulated and are indicated in Table 4.29.

Table 4.29: Stakeholder Identification & Analysis and Performance of County MHP

	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Dev.
Key internal and external stakeholders involved in the program are always identified	0 (0.0)	0 (0.0)	0 (0.0)	63 (38.7)	100 (61.3)	4.614	0.988

Identifying and securing sources of sustainable funding does not happen through a consultative process for key stakeholders	0 (0.0)	0 (0.0)	2 (1.2)	75 (46.0)	86 (52.8)	4.515	0.525
There's maternal health participatory planning and decision making through a consensus building process at the county.	35 (21.5)	22 (13.5)	26 (16.0)	77 (47.2)	3 (1.8)	2.945	0.744
Program managers or M&E specialists identify the most critical M&E questions the program will investigate with input from all stakeholders.	0 (0.0)	0 (0.0)	0 (0.0)	77 (47.2)	86 (52.8)	4.528	0.501
Contributions of stakeholders (both negative and positive) and their effect on the manner data has been utilized for decision making are documented.	0 (0.0)	0 (0.0)	0 (0.0)	72 (44.2)	91 (55.8)	4.558	0.998
Sub-composite Mean and Standard deviation						4.232	0.751

From the outcomes in Table 4.29, on the statement that major internal and external stakeholders participating in the program are always identified, the average was 4.614 and std.dev was 0.988. The item had a mean score above the composite mean of 4.232 implying that key internal and external stakeholders participating in the program are always identified. Further, the std.dev was above the sub-composite std.dev of 0.751 meaning that the views converged.

On the item, identifying and securing sources of sustainable funding does not happen through a consultative process for key stakeholders, the average was 4.515 and standard deviation was 0.525. The item had a mean score above the composite mean of 4.232 implying that identifying and securing sources of sustainable funding does not happen through a consultative process for key stakeholders. Further, the std.dev was lower than the sub-composite std.dev of 0.751 meaning that the views converged.

On the statement that there's maternal health participatory planning and decision making through a consensus building process at the county, the average was 2.945 and standard deviation was 0.744. The item had a mean score smaller than the composite mean of 4.232 meaning that there's no maternal health participatory planning and decision making through a consensus building process at the county. Further, the std.dev was smaller sub-overall std.dev of 0.751 meaning that the views converged.

On the statement that the most essential M&E questions the program will review are identified by program managers with all stakeholders input, the average was 4.528 and standard deviation was 0.501. The item had a mean score above the composite mean of 4.232 implying that the most essential M&E queries the program will review are identified by program managers or all stakeholders inputs. Further, the std.dev was smaller than sub-overall std.dev of 0.751 denoting that the views converged.

From the statement that contributions of stakeholders (both negative and positive) and their effect on the manner data has been used for decision making are documented, the average was 4.558 and standard deviation was 0.998. The item had a mean score above the composite mean of 4.232 implying that contributions of stakeholders (both negative and positive) and their effect on the manner data has been utilized for decision making are documented. Further, the std.dev was greater than sub-composite std.dev of 0.751 meaning that the views were inconsistent.

4.7.3 Stakeholder Communication and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements on stakeholder communication in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are tabulated and indicated in Table 4.30.

Table 4.30: Stakeholder Communication and Performance of maternal health programmes

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
Ways and communication channels to influence exchange of data on M&E among stakeholders exist.	28 (17.2)	28 (17.2)	29 (17.8)	78 (47.9)	0 (0.0)	2.963	0.659
There is strong coordination of stakeholders and partnerships	0 (0.0)	0 (0.0)	0 (0.0)	73 (44.8)	90 (55.2)	4.552	0.999
A stakeholder engagement and communication plan showing the roles of each stakeholder exists.	0 (0.0)	0 (0.0)	0 (0.0)	70 (42.9)	93 (57.1)	4.571	0.997
The synergy and close working relationship between the county M&E unit and or the county health M&E unit is weak and needs to be improved.	16 (9.8)	17 (10.4)	17 (10.4)	41 (25.2)	72 (44.2)	3.834	0.853
National M&E system information products (reports, website, newsletters and charts) are useful.	0 (0.0)	0 (0.0)	2 (1.2)	70 (42.9)	91 (55.8)	4.546	0.524

Sub-composite	4.093	0.806
Mean and Standard deviation		

Results in Table 4.30 relate to stakeholder communication and performance of County MHP. As per the statement that there are structures and communication channels in place to promote the exchange of M&E information among stakeholders, the average was 2.963 and standard deviation was 0.659. The item had a mean score lower than the composite mean of 4.093 meaning that there are structures and communication channels in place to promote the exchange of M&E information among stakeholders. Further, the std.dev was below the sub-overall std.dev of 0.806 signifying that the views converged.

On the statement that there is strong coordination of stakeholders and partnerships, the average was 4.552 and std.dev was 0.999. The item had a mean score above the composite mean of 4.093 implying that there is strong coordination of stakeholders and partnerships. Further, the std.dev was above the sub-overall std.dev of 0.806 suggesting that the sentiments were inconsistent.

On the statement that a stakeholder engagement and communication plan showing the roles of each stakeholder exists, the average was 4.571 and std.dev was 0.997. The item had a mean score above the composite mean of 4.093 implying that a stakeholder engagement and communication plan showing the roles of each stakeholder exists. Further, the std.dev was greater than sub-overall std.dev of 0.806 suggesting that the views were varying.

About the synergy and close working relationship between the county M&E unit and or the county health M&E unit is weak and needs to be improved, the average was 3.834 and std.dev was 0.853. The item had a mean score lower than the cm of 4.093 denoting that the synergy and close working relationship between the county M&E unit and or the county health M&E unit was strong and need not be improved. Further, the std.dev was above the sub-composite std.dev of 0.806 implying that the views converged.

On the statement that National M&E system information products (reports, website, newsletters and charts) are useful, the average was 4.546 and standard deviation was

0.524. The item had a mean score above the composite mean of 4.093 implying that National M&E system information products (reports, website, newsletters and charts) are useful. Further, the std.dev was below the sub-overall std.dev of 0.806 denoting that the views converged.

4.7.4 Collaborations and Performance of maternal health programmes

The respondents were required to indicate their level of agreement with the statements on collaborations in relation to performance of the county maternal health using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are indicated in Table 4.31.

Table 4.31: Collaborations and Performance of maternal health programmes

	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Dev.
International partners actively participate in county maternal health matters.	5 (3.1)	1 (0.6)	3 (1.8)	5 (3.1)	149 (91.4)	4.791	0.814
County maternal health program sought the opinion of county government officials, donors, CBOs, civil society and CHVs.	14 (8.6)	13 (8.0)	21 (12.9)	60 (36.8)	55 (33.7)	3.791	0.735

An updated inventory of stakeholders for county maternal health M&E does not exist.	6 (3.7)	9 (5.5)	11 (6.7)	98 (60.1)	39 (23.9)	3.951	0.928
County health directors and managers are interested and support M&E activities in our department.	9 (5.5)	13 (8.0)	7 (4.3)	52 (31.9)	82 (50.3)	4.135	0.663
We rely on donors to support site visits to monitor, verify data reported, and supervise health facilities.	11 (6.7)	15 (9.2)	12 (7.4)	97 (59.5)	28 (17.2)	3.712	0.570
Sub-composite						4.076	0.742
Mean and Standard deviation							

Table 4.31 presents findings on collaborations and performance of County MHP. As per the statement that international development partners actively participate in county maternal health matters, the average was 4.791 and std.dev was 0.814. The item had a mean score above the composite mean of 4.076 implying that international development partners actively participate in county maternal health matters. Further, the std.dev was above the sub-overall std.dev of 0.742 denoting that the views were inconsistent.

About if the county maternal health program sought the opinion of county government officials, donors, CBOs, civil society and CHVs, the average was 3.791 and standard deviation was 0.735. The item had a mean score smaller than the composite mean of

4.076 implying that county maternal health program do not seek the opinion of county government officials, donors, CBOs, civil society and CHVs. Further, the std.dev was below the sub-overall std.dev of 0.742 signifying that the views converged.

Further, on the statement that an updated inventory of stakeholders for county maternal health M&E does not exist, the average was 3.951 and std.dev was 0.928. The item had a mean score lesser than the overall mean of 4.076 implying that an updated inventory of stakeholders for county maternal health M&E exists. Further, the std.dev was above the sub-overall std.dev of 0.742 denoting that the views were inconsistent.

On the statement that county health directors and managers are concerned and support M&E operations in the department, the average was 4.135 and std.dev was 0.663. The item had a mean score above the composite mean of 4.076 implying that county health directors and managers are concerned and support M&E operations in the department. Further, the std.dev was lesser than the sub-overall std.dev of 0.742 denoting that the views converged.

On the item, the staff rely on donors to support site visits to monitor, verify data reported, and supervise health facilities, the average was 3.712 and std.dev was 0.570. The item had a mean score lesser than the overall mean of 4.076 suggesting that the staff does not rely on donors to support site visits to monitor, verify data reported, and supervise health facilities. Further, the std.dev was lesser than the sub-overall std.dev of 0.742 implying that the views converged.

4.7.5 Community Participation and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements on community participation in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are tabulated and indicated in Table 4.32.

Table 4.32: Community Participation and Performance of County MHP

	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Dev.
Public participation happens in maternal health planning and decision making.	23 (14.1)	16 (9.8)	19 (11.7)	58 (35.6)	47 (28.8)	3.552	0.871
Community health workers are involved in maternal health planning and decision making.	9 (5.5)	13 (8.0)	21 (12.9)	48 (29.4)	72 (44.2)	3.988	0.681
Traditional birth attendants are not involved in maternal health planning and decision making.	5 (3.1)	4 (2.5)	3 (1.8)	103 (63.2)	48 (29.4)	4.135	0.820
There are well developed mechanisms e.g. feedback reports, newsletters to communicate about maternal health M&E activities and decisions to the community.	5 (3.1)	3 (1.8)	23 (14.1)	60 (36.8)	72 (44.2)	4.172	0.953

Community health workers and our maternal program is working seamlessly	3	1	4	33	122	4.656	0.732
	(1.8)	(0.6)	(2.5)	(20.2)	(74.8)		
Sub-composite mean and standard deviation						4.101	0.811

Table 4.32 reveals findings relating to community participation and performance of County MHP. On the statement that public participation happens in maternal health planning and decision making, the average was 3.552 and std.dev was 0.871. The item had a mean score below the composite mean of 4.101 suggesting that public participation does not happen in maternal health planning and decision making. Further, the std.dev was above the sub-composite std.dev of 0.811 inferring that the views were inconsistent.

On the statement that community health workers are engage in maternal health planning and coming up with decisions, the average was 3.988 and std.dev was 0.681. The item had a mean score lower than the composite mean of 4.101 suggesting that community health workers are not involved in maternal health planning and decision making. Further, the std.dev was below the sub-composite std.dev of 0.811 suggesting that the views converged.

On the statement that traditional birth attendants are not involved in maternal health planning and decision making, the average was 4.135 and std.dev was 0.820. The item had a mean score above the composite mean of 4.101 implying that traditional birth attendants are not involved in maternal health planning and decision making. Further, the std.dev was above the sub-overall std.dev of 0.811 implying that the thoughts were inconsistent.

On about if there are well developed mechanisms e.g. feedback reports, newsletters to communicate about maternal health M&E activities and decisions to the community, the average was 4.172 and std.dev was 0.953. The item had a mean score above the composite mean of 4.101 implying that there are there are well developed mechanisms (feedback reports, newsletters to communicate about maternal health

M&E activities and decisions to the community). Further, the std.dev was more than the sub-composite std.dev of 0.811 implying that the views were inconsistent.

About if the community health workers and the maternal program are working seamlessly, the average was 4.656 and std.dev was 0.732. The item had a mean score above the composite mean of 4.101 implying that community health workers and the maternal program are working seamlessly. Further, the std.dev was below the sub-overall std.dev of 0.811 suggesting that the views converged.

4.7.6 Overall Descriptive Analysis of Stakeholder Engagement for M&E

The overall stakeholders' engagement in M&E was measured in terms of advocacy to promote M&E, stakeholder identification & analysis, stakeholder communication, collaborations, and community participation. The outcomes are shown in Table 4.33.

Table 4.33: Means and Standard Deviations of Stakeholder Engagement for M&E

Variable Dimension/Indicator	Sub-composite	Sub-composite
	Mean (M)	Std. Dev.
Advocacy to promote M&E	3.959	0.824
Stakeholder identification & analysis	4.232	0.751
Stakeholder communication	4.093	0.806
Collaborations	4.076	0.742
Community participation	4.101	0.811
Composite mean and standard deviation	4.092	0.787

Outcomes in table 4.33 indicate that the composite mean of stakeholders' engagement in M&E was 4.092. The most leading indicator was stakeholder identification & analysis (M=4.232) whereby the study findings revealed that key internal and external stakeholders participate in the program are always identified, the most essential M&E questions the program will investigate are identified by program managers or M&E specialists with input from all stakeholders and contributions of stakeholders (both negative and positive) and their influence the manner data has been used for decision making are documented. However, there's no maternal health participatory planning and decision making through a consensus building process at the county, and identifying and securing sources of sustainable funding does not happen through a

consultative process for key stakeholders. Views on this dimension converged given the sub overall std.dev of 0.751 was below the overall std.dev of 0.787.

Community participation (M=4.101) was achieved and this was showed by the well-developed mechanisms e.g. feedback reports, newsletters to communicate about maternal health M&E activities and decisions to the community, and seamless working of community health workers and the maternal program. However, public participation does not happen in maternal health planning and decision making, community health workers are not involved in maternal health planning and decision making, and traditional birth attendants are not involved in maternal health planning and decision making. Views appeared to diverge given the sub composite std.dev of 0.811 was above the composite std.dev of 0.787.

The aspect, stakeholder communication (M=4.093) was achieved. It was evident that there was strong coordination of stakeholders and partnerships, there was existence of a stakeholder engagement and communication plan showing the roles of each stakeholder, and that the National M&E system information products (reports, website, newsletters and charts) were useful. The synergy and close working relationship between the county M&E unit and or the county health M&E unit was also strong and needed not be improved. However, ways and communication ways to influence exchange of data on M&E amid stakeholders did not exist. Views on this dimension diverged because the sub overall std.dev of 0.806 was above the overall std.dev of 0.787.

Collaborations (M=4.076) were not achieved. This could be seen when the county maternal health program do not seek the opinion of county government officials, donors, CBOs, civil society and CHVs, the staff also does not rely on donors to support site visits to monitor, verify data reported, and supervise health facilities. However, the county health directors and managers are concerned and support M&E activities in the department, an updated inventory of stakeholders for county maternal health M&E exists, and international development partners actively participate in county maternal health matters. Views on this dimension converged given because the sub overall std.dev of 0.742 was lower than the overall std.dev of 0.787.

The dimension, advocacy to promote M&E (M=3.959) was not achieved. It was evident since there were people who strongly didn't advocate for and support M&E within the county, the staff was also not confident with the county M&E stakeholders' management plans & practices, and the staff did not receive M&E mentorship from the national MoH M&E teams. However, there was a maternal health M&E Technical Working Group (TWG) /committee at the county but did not meet regularly. Views on this dimension diverged given since the sub overall std.dev of 0.824 was above the overall std.dev of 0.787.

4.7.7 Correlation between Stakeholder Engagement for M&E and Performance of County MHP

The purpose of the analysis was to determine the direction and size of the relationship between the investigated independent and dependent variables. This was in relation with the study's second goal, which was to determine how stakeholders' participation in M&E affects the success of Kenyan county maternal health programs. Table 4.34 shows the outcomes of the data collected from the respondents.

Table 4.34: Correlation between Stakeholder Engagement for M&E and Performance of County MHP

		Stakeholder Engagement for M&E
Performance of maternal health programmes	Pearson Correlation	0.838
	Sig. (2-tailed)	.001

Table 4.34 indicate strong correlation link the performance of county MHP and stakeholders engagement in M&E since it had $r=0.838$ and $p=0.001 < 0.05$. This therefore implied that stakeholders' engagement in M&E was significant and that there was a strong correlation amid the performance of county MHP and stakeholder's engagement in M&E.

4.7.8 Regression Analysis of Influence of Stakeholder Engagement for M&E on Performance of maternal health programmes

Further, linear regression analysis was done to find out the influence of stakeholders' engagement in M&E on performance of maternal health programmes in Kenyan County Governments. Additionally, in testing its hypothesis data was obtained from

the participants on stakeholders' engagement in M&E variables and then the composite index was calculated and utilized in the analysis. The following hypothesis was developed and tested in accordance with objective two.

4.7.8.1 Hypothesis Testing

To meet the second objective, the following hypothesis was evaluated using a simple regression model.

H_a: Stakeholder engagement for M&E significantly influences performance of maternal health programmes in Kenyan County Governments.

H₀: Stakeholder engagement for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments

Regression Model

The mathematical model utilized for testing the null hypothesis was as shown:

Performance of maternal health programmes = f (Stakeholders engagement in M&E)

$$Y = f(X_2, \epsilon)$$

$$Y = \beta_0 + \beta_2 X_2 + \epsilon$$

Where Y = Performance of County Maternal Health Programmes

X₂ = Stakeholders engagement in M&E

β₀ = Constant term

β₂ = Beta coefficients

ε = Error term

Analysis was done and the regression outcomes for the influence of stakeholders' engagement in M&E on performance of maternal health programmes in Kenyan County Governments are presented in Table 4.35.

Table 4.35: Stakeholders engagement in M&E and Performance of maternal health programmes

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	0.838	0.703	0.701	1.551		
ANOVA						
Model	Sum of Squares	Df	Mean Square	F	Sig.	

1	Regression	914.414	1	914.414	380.236	3.06E-44
	Residual	387.182	161	2.405		
	Total	1301.596	162			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
1		B	Std. Error	Beta		
1	(Constant)	0.987	0.208		4.745	.000
	Stakeholders engagement in M&E	0.895	0.245	0.838	3.653	.000
Predictors: (constant), Stakeholders engagement in M&E Dependent Variable: Performance of County Maternal Health Programmes						

Table 4.35 shows that $r=0.838$. This means that stakeholders' engagement in M&E has a strong link with performance of maternal health programmes in Kenyan County Governments. $R^2 = 0.703$ suggesting that stakeholders engagement in M&E describes 70.3% of the variations in the performance of maternal health programmes in Kenyan County Governments. The overall F statistics, ($F = 380.236$, $p=3.06E-44 < 0.05$), noted that there was a statistically significant relationship between stakeholders engagement in M&E and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was then rejected, and it was resolved that stakeholders' engagement in M&E significantly influences performance of maternal health programmes in Kenyan County Governments.

4.7.9 Findings from Qualitative Information

From the interviews, the research sought whether there were advocacy activities to promote monitoring and evaluation at the county. The nursing services managers indicated that they did through public participation, data analysis meetings, meeting on new guidelines, through sub-county executive management committees, through the community health committees, donor agencies, and data review and trainings.

Also, the medical superintendents were required to indicate how stakeholders are identified at the county, specifically those involved in maternal health. They indicated that by conducting surveys in the community, during meetings, public participation

program, through the ministry of health, forums, assessment and interview process, various projects done, stakeholders family, invitation, doing community entry and meetings, and lobbying.

The key informants were also required to indicate how they analyzed and allocated roles and responsibilities for the various stakeholders. They indicated that by spreading workers to different departments, through forums, by considering the expertise of the stakeholders, special taskforce within the sub-county, by improving the capacity of staff through continuous improvement education, though lobbying, and through stakeholders' fund.

Moreover, they indicated how stakeholder communication on matters of maternal health at the county is conducted. They indicated during meetings, MoH programs, Hierarchy and organogram. One of the CHMT members said:

“Communication channels are very open among the stakeholders and management on matters of maternal health. The community’s response has been positive; they believe that local civil societies are more than empowering the lifestyle of our community as change agents. They have owned the process and appreciate the work that we are doing”

One of the County delivery unit members said:

“Through TWG’s (Technical work groups) which hold meetings mostly and consist of representatives from all stakeholders. The commonest channel used to communicate maternal and child healthcare is through radio, specifically vernacular radio stations. This is due to the socioeconomic dynamics of the women, most of whom would be home going about their daily chores, and their most accessible media channel being radio.”

The nursing services managers were also asked to indicate the collaborations that existed with county, national and international stakeholders in maternal health. They indicated that when providing materials and sharing of data on maternal health, through technical working groups (TWG), through provision of resources and supplies, at county and sub-county levels, reporting system for both the county and stakeholders within the county and this is integrated into the national system.

Moreover, they indicated that there were specific persons responsible for managing stakeholders, partners and collaborators in maternal health issues who included the CHO in each sub-county, procurement specialists, maternal health committee officials and hospital management heads. Majority of them indicated that did not involve the community when planning for maternal health issues. Those who did however involve them at the planning phase to help coordinate resources at the grassroots, through public participation and involvement, community entry level and sensitization meetings.

4.8 Capacity Building for M&E and Performance of County MHP

This section dealt with objective three of the study which sought to assess how capacity building for M&E influence performance of maternal health programmes in Kenyan County Governments. Capacity building for M&E was assessed by technical expertise in M&E, training and supervision, M&E workforce development plan, IT infrastructure, and M&E capacity assessment.

4.8.1 Technical Expertise in M&E and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements on technical expertise in M&E in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are illustrated in Table 4.36.

Table 4.36: Technical Expertise in M&E and Performance of County MHPS

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
Human resources for maintaining and updating the county maternal health databases are adequate.	29 (17.8)	21 (12.9)	21 (12.9)	69 (42.3)	23 (14.1)	3.221	0.838
I'm not familiar with the county integrated monitoring &	0 (0.0)	0 (0.0)	0 (0.0)	68 (41.7)	95 (58.3)	4.583	0.995

evaluation guidelines.							
Staff involved in M&E have skills and competencies needed to fulfill the county maternal health programs M&E mandate	0 (0.0)	0 (0.0)	0 (0.0)	63 (38.7)	100 (61.3)	4.614	0.988
A maternal health research and evaluation agenda exists that directs research and evaluation activities.	16 (9.8)	9 (5.5)	10 (6.1)	57 (35.0)	71 (43.6)	3.969	0.769
Health facility surveys at maternal health related service delivery points are conducted regularly	14 (8.6)	29 (17.8)	17 (10.4)	62 (38.0)	41 (25.2)	3.534	0.778
Sub-composite mean and standard deviation						3.984	0.874

The findings in Table 4.36 revealed that on the statement that human resources for maintaining and updating the county maternal health databases are adequate, the mean was 3.221 and std.dev was 0.838. The item had a mean score lesser than the compound mean of 3.984 implying that human resources for maintaining and updating the county maternal health databases were not adequate. Further, the std.dev was lesser than the sub-overall std.dev of 0.874 inferring that the views converged.

On the statements that the staff is not familiar with the county integrated monitoring & evaluation guidelines, the mean was 4.583 and std.dev was 0.995. The item had a mean score above the compound mean of 3.984 implying that the staff is not familiar with the county integrated monitoring & evaluation guidelines. Further, the std.dev

was more than the sub-composite std.dev of 0.874 implying that the views were inconsistent.

Regarding the statement that staff participated in M&E has skills and competencies needed to fulfill the county maternal health programs M&E mandate, the mean was 4.614 and std.dev was 0.988. The item had a mean score above the composite mean (cm) of 3.984 denoting that the staff involved in M&E has skills and competencies needed to fulfill the county maternal health programs M&E mandate. Further, the std.dev was above the sub-composite std.dev of 0.874 inferring that the views were inconsistent.

On the statement that a maternal health research and evaluation agenda exists that directs research and evaluation activities, the mean was 3.969 and std.dev as 0.769. The item had a mean score lower than the cm of 3.984 implying that a maternal health research and evaluation agenda does not exist that directs research and evaluation activities. Further, the std.dev was less than the sub-overall std.dev of 0.874 inferring that the views converged.

On the statement that health facility surveys at maternal health related service delivery points are conducted regularly, the mean was 3.534 and std.dev was 0.778. The item had a mean score lesser than the composite mean of 3.984 implying that the health facility surveys at maternal health related service delivery points are not conducted regularly. Further, the std.dev was lesser than the sub-composite std.dev of 0.874 inferring that the views converged.

4.8.2 Training and Supervision and Performance of County MHP

The respondents were needed to point out their level of agreement with the statements on training and supervision in relation to performance of the county MHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are illustrated in Table 4.37.

Table 4.37: Training and Supervision and Performance of maternal health programmes

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
Human capacity for M&E is usually enhanced through on job training, mentorship & coaching.	14 (8.6)	9 (5.5)	8 (4.9)	61 (37.4)	71 (43.6)	4.018	0.720
M&E staff doesn't attend M&E conferences, workshops, team building activities regularly.	21 (12.9)	25 (15.3)	29 (17.8)	81 (49.7)	7 (4.3)	3.172	0.647
There's a county endorsed M&E training curriculum appropriate for personnel at county maternal health program.	21 (12.9)	22 (13.5)	31 (19.0)	82 (50.3)	7 (4.3)	3.196	0.638
There are no plans for ensuring that new skills and staff are utilized effectively.	10 (6.1)	10 (6.1)	17 (10.4)	38 (23.3)	88 (54.0)	4.129	0.697
M&E human capacity is built through colleges and technical schools within the county.	18 (11.0)	21 (12.9)	14 (8.6)	32 (19.6)	78 (47.9)	3.804	0.931
Sub-composite mean and standard deviation						3.664	0.727

Table 4.37 shows the findings relating to training and supervision and performance of County MHP. On the statement that human capacity for M&E is usually enhanced through on job training, mentorship & coaching, the mean was 4.018 and std dev was 0.720. The item had a mean score above the cm of 3.664 suggesting that the human capacity for M&E is usually enhanced through on job training, mentorship & coaching. Further, the std.dev was lesser than the sub-composite std.dev of 0.727 implying that the viewed converged.

Regarding the statement that M&E staff doesn't attend M&E conferences, workshops, team building activities regularly, the mean was 3.172 and std.dev was 0.647. The item had a mean score below the cm of 3.664 implying that the M&E staff attends M&E conferences, workshops, team building activities regularly. Further, the std.dev was less than the sub-overall std.dev of 0.727 inferring that the views converged.

On the statement that there's a county endorsed M&E training curriculum appropriate for personnel at county maternal health program, the mean was 3.196 and std.dev was 0.638. The item had a mean score lower than the cm of 3.664 implying that there's no county endorsed M&E training curriculum appropriate for personnel at county maternal health program. Further, the std.dev was below the sub-below std.dev of 0.727 meaning that the views converged.

On the statement that there are no plans for ensuring that new skills and staff are utilized effectively, the mean was 4.129 and std.dev was 0.697. The item had a mean score above the cm of 3.664 implying that there are no plans for ensuring that new skills and staff are utilized effectively. Further, the std.dev was below the sub-composite std.dev of 0.727 suggesting that the opinions converged.

About M&E human capacity is built through colleges and technical schools within the county, the mean was 3.804 and std.dev was 0.931. The item had a mean score above the cm of 3.664 implying that the M&E human capacity was built through colleges and technical schools within the county. Further, the std.dev was greater than the sub-composite std.dev of 0.727 suggesting that the views were varied.

4.8.3 M&E Workforce Development Plan and Performance of County MHP

The respondents were needed to note their level of agreement with the statements on M&E workforce development plan in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are tabulated and indicated in Table 4.38.

Table 4.38: M&E Workforce Development Plan and Performance of County MHP

	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Dev.
There is county maternal health M&E capacity building plan to address capacity gaps in our department.	27 (16.6)	25 (15.3)	26 (16.0)	74 (45.4)	11 (6.7)	3.104	0.740
There is overreliance on external stakeholders like NGOs and donors to handle M&E activities	24 (14.7)	26 (16.0)	32 (19.6)	70 (42.9)	11 (6.7)	3.110	0.702
Resources – human, financial, material – are committed to execute the M&E work plan	18 (11.0)	0 (0.0)	0 (0.0)	63 (38.7)	82 (50.3)	4.172	0.715
There’s a county database of trainers and other technical service providers capable of building M&E capacity.	0 (0.0)	0 (0.0)	0 (0.0)	62 (38.0)	101 (62.0)	4.620	0.987
M&E personnel do not have opportunities for lateral and vertical career moves within the county.	0 (0.0)	0 (0.0)	0 (0.0)	70 (42.9)	93 (57.1)	4.571	0.997

Sub-composite mean	3.915	0.828
and standard deviation		

The study findings presented in Table 4.38 relate to M&E workforce development plan and performance of County MHP. On the statement that there is county maternal health M&E capacity building plan to address capacity gaps in our department, the mean was 3.104 and std.dev was 0.740. The item had a mean score below the cm of 3.915 meaning that there is no county maternal health M&E capacity building plan to address capacity gaps in our department. Further, the std.dev was below the sub-overall std.dev of 0.828 suggesting that the views converged.

On the statement that there is overreliance on external stakeholders like NGOs and donors to handle M&E activities, the mean was 3.110 and std.dev was 0.702. The item had a mean score lower than the cm of 3.915 implying that there is no overreliance on external stakeholders like NGOs and donors to handle M&E activities. Further, the std.dev was lesser than the sub-overall std.dev of 0.828 inferring that the views converged.

About that resources – human, material, financial– are dedicated to excute the M&E work plan, the mean was 4.172 and std.dev was 0.715. The item had a mean score above the cm of 3.915 implying that resources are devoted to executing the M&E work plan. Further, the std.dev was lesser than the sub-overall std.dev of 0.828 suggesting that the views convergent.

Regarding that there’s a county database of trainers and other technical service providers able to build M&E capacity, the mean was 4.620 and std.dev was 0.987. The item had a mean score above the cm of 3.915 implying that there’s a county database of trainers and other technical service providers able to build M&E capacity. Further, the std.dev was greater than the sub-composite std.dev of 0.828 suggesting that the views were inconsistent.

About M&E staff do not have chances for lateral and vertical career moves within the county, the mean was 4.571 and std.dev was 0.997. The item had a mean value above the cm of 3.915 inferring that M&E staff do not have chances for lateral and vertical career moves within the county. Further, the std.dev was higher thena the sub-composite std.dev of 0.828 inferring that the views were varying.

4.8.4 IT Infrastructure and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements on IT infrastructure in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are as shown in Table 4.39.

Table 4.39: IT Infrastructure and Performance of maternal health programmes

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
IT equipment and supplies are available for maintaining the county maternal health databases.	20 (12.3)	28 (17.2)	25 (15.3)	53 (32.5)	37 (22.7)	3.362	0.833
IT capacity for our department is enough and effective.	12 (7.4)	8 (4.9)	9 (5.5)	60 (36.8)	74 (45.4)	4.080	0.671
We do not have enough computers to work with	4 (2.5)	1 (0.6)	6 (3.7)	53 (32.5)	99 (60.7)	4.485	0.812
We do not have internet connectivity on our work computers	3 (1.8)	2 (1.2)	6 (3.7)	42 (25.8)	110 (67.5)	4.558	0.786
Sub-composite mean and standard deviation						4.121	0.776

Table 4.39 presents findings on IT infrastructure and performance of County MHP. On the statement that IT equipment and supplies are available for maintaining the

county maternal health databases, the mean was 3.362 and std.dev was 0.833. The item had a mean score lower than the cm of 4.121 suggesting that IT equipment and supplies are not available for maintaining the county maternal health databases. Further, the std.dev was above the sub-overall std.dev views of 0.776 inferring that the views were inconsistent.

On the statement that IT capacity for the department is enough and effective, the mean was 4.080 and std.dev was 0.671. The item had a mean score lower than the overall mean of 4.121 implying that the IT capacity for the department was not enough and effective. Further, the std.dev was lower than the sub-composite std.dev of 0.776 implying that the views converged.

Regarding the staff do not have enough computers to work with, 99 (60.7%) of the participants strongly agreed, the mean was 4.485 and std.dev was 0.812. The item had a mean alue above the cm of 4.121 implying that the staff doesn't have enough computers to work with. Further, the std.dev was higher than the sub-overall std.dev of 0.776 inferring that the views were inconsistent.

On the statement that the staff do not have internet connectivity on work computers, the mean was 4.558 and std.dev was 0.786. The item had a mean value above the cm of 4.121 suggesting that the staff doesn't have internet connectivity on work computers. Further, the std.dev was above the sub-composite std.dev of 0.776 inferring that the opinions were varying.

4.8.5 M&E Capacity Assessment and Performance of County MHPS

The participants were needed to specify their level of agreement with the statements on M&E capacity assessment in relation to performance of the county MHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are illustrated in Table 4.40.

Table 4.40: M&E Capacity Assessment and Performance of County MHP

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
Maternal health	2	1	1	158	1	3.951	0.882
M&E related skills and competencies of	(1.2)	(0.6)	(0.6)	(96.9)	(0.6)		

the M&E staff are assessed regularly							
The gaps in terms of M&E skills and competencies of county M&E staff are identified and incorporated in the capacity building plan.	4 (2.5)	1 (0.6)	2 (1.2)	3 (1.8)	153 (93.9)	4.841	0.702
M&E needs assessment has been conducted.	2 (1.2)	2 (1.2)	4 (2.5)	127 (77.9)	28 (17.2)	4.086	0.592
In our maternal health program, we seek feedback from our clients regularly	3 (1.8)	7 (4.3)	3 (1.8)	59 (36.2)	91 (55.8)	4.399	0.872
The maternal health M&E capacity building offered is coordinated to avoid duplication.	4 (2.5)	8 (4.9)	5 (3.1)	61 (37.4)	85 (52.1)	4.319	0.934
Sub-composite mean and standard deviation						4.319	0.796

Results in Table 4.40 are on M&E capacity assessment and performance of County MHP. On the statement that maternal health M&E related skills and competencies of the M&E staff are assessed regularly, the mean was 3.951 and std.dev was 0.882. The item had a mean score lower than the cm of 4.319 inferring that maternal health M&E related skills and competencies of the M&E staff are not assessed regularly. Further, the std.dev was higher than the sub-overall std.dev of 0.796 denoting that the views were inconsistent.

On the statement that the gaps in terms of M&E skills and competencies of county M&E staff are identified and incorporated in the capacity building plan, the mean was 4.841 and std.dev was 0.702. The item had a mean score above the cm of 4.319 implying that the gaps in terms of M&E skills and competencies of county M&E staff are identified and incorporated in the capacity building plan. Further, the std.dev was below the sub-composite std.dev of 0.796 meaning that the opinions converged.

About M&E needs assessment has been conducted, the mean was 4.086 and std.dev was 0.592. The item had a mean score lower than the cm of 4.319 implying that M&E needs assessment has not been conducted. Further, the std.dev was lesser than the sub-overall std.dev of 0.796 suggesting that the views converged.

Regarding the statement that in the maternal health program, the staff seek feedback from the clients regularly, the mean was 4.399 and std.dev was 0.872. The item had a mean score above the cm of 4.319 implying that in the maternal health program, the staff sought feedback from the clients regularly. Further, the std.dev was greater than the sub-composite std.dev of 0.796 suggesting that the views were inconsistent.

On the item, the maternal health M&E capacity building offered is coordinated to avoid duplication, the mean was 4.319 and std.dev was 0.934. The item had a mean score same as the cm of 4.319 implying that it was not sure whether the maternal health M&E capacity building offered is coordinated to avoid duplication. Further, the std.dev was higher than the sub-composite std.dev of 0.796 inferring that the views were varying.

4.8.6 Overall Descriptive Analysis of Capacity Building for M&E

The overall capacity building for M&E was measured in terms of technical expertise in M&E, training and supervision, M&E workforce development plan, IT infrastructure, and M&E capacity assessment. The composite mean and std.dev of these elements are illustrated in Table 4.41.

Table 4.41: Means and Standard Deviations of Capacity Building for M&E

Variable Dimension/Indicator	Sub-composite Mean (M)	Sub-composite Std. Dev.
Technical expertise in M&E	3.984	0.874
Training and supervision	3.664	0.727
M&E workforce development plan	3.915	0.828
IT infrastructure	4.121	0.776
M&E capacity assessment	4.319	0.796
Composite mean and standard deviation	4.001	0.800

Results in Table 4.41 indicate that the overall mean of capacity building for M&E was 4.001. The most dominant indicator was M&E capacity assessment (M=4.319) whereby the study outcomes revealed that the gaps in terms of M&E skills and competencies of county M&E staff are identified and incorporated in the plan for

capacity building, and the maternal health program, the staff sought feedback from the clients regularly. However, maternal health M&E related skills and competencies of the M&E staff are not assessed regularly, M&E needs assessment has not been conducted and was not sure whether the maternal health M&E capacity building offered is coordinated to avoid duplication. Views on this dimension converged given the sub overall std.dev of 0.796 was lower than the composite std.dev of 0.800.

IT infrastructure (M=4.121) was also found to influence performance of the county MHP and this was showed by the unavailability of IT equipment and supplies for maintaining the county maternal health databases, inadequate IT capacity for the department, and lack of staff internet connectivity. Views appeared to converge given the sub composite std.dev of 0.776 was lower than the composite std.dev of 0.800.

The dimension, technical expertise in M&E (M=3.984) was not achieved. It was evident that human resources for maintaining and updating the county maternal health databases were not adequate. Also, the staff was not familiar with the county integrated monitoring & evaluation guidelines, the maternal health research and evaluation agenda that directs research and evaluation activities did not exist, and the health facility surveys were not conducted regularly. However, the staff involved in M&E has skills and competencies needed to fulfill the county maternal health programs M&E mandate. Views on this dimension diverged given because the sub overall std.dev of 0.874 was above the composite std.dev of 0.800.

M&E workforce development plan (M=3.915) was not achieved. This could be seen by the lack of opportunities for lateral and vertical career moves for M&E personnel, the lack of overreliance on external stakeholders like NGOs and donors to handle M&E activities, and lack of county maternal health M&E ability to create a plan to address capacity gaps in the department. However, there's a county database of trainers and other technical service providers capable of building M&E ability and resources – human, material, financial–committed to execute the M&E work plan. Views on this dimension diverged given since the sub overall std.dev of 0.828 was above than the overall std.dev of 0.800.

The dimension, training and supervision (M=3.664) was not achieved. It was evident since there's no county endorsed M&E training curriculum appropriate for personnel

at county maternal health program, and there are no plans for ensuring that new skills and staff are utilized effectively. However, the M&E staff attends M&E conferences, workshops, team building activities regularly, the human capacity for M&E is usually enhanced on job training, mentorship & coaching. Views on this dimension converged given since the sub overall std.dev of 0.727 was below the overall std.dev of 0.800.

4.8.7 Correlation between Capacity Building for M&E and Performance of maternal health programmes

The goal of the analysis was to determine the direction and size of the relationship between the investigated predictor and response variables. This was in line with the study's third goal, which was to see how capacity building for M&E affects the performance of Kenyan county MHP. Table 4.42 summarizes the findings.

Table 4.42: Correlation between Capacity building for M&E and Performance of maternal health programmes

		Capacity building for M&E
Performance of maternal health programmes	Pearson Correlation	0.796
	Sig. (2-tailed)	.028

Table 4.42 indicate strong correlation among the performance of county MHP and capacity building for M&E since its $r=0.796$ and $p=0.028<0.05$. This variable was hence significant. There was therefore a strong correlation amid the performance of maternal health programmes and capacity building for M&E.

4.8.8 Regression Analysis of Influence of Capacity Building for M&E on Performance of maternal health programmes

In addition, the linear regression analysis was done to assess capacity building for M&E influences performance of maternal health programmes in Kenyan County Governments. In testing its hypothesis, likewise data was obtained from the participants and then the composite index for each of the capacity building for M&E was calculated and utilied in the analysis. The following hypothesis, which aligned with objective three, was developed and put to the test.

4.8.8.1 Hypothesis Testing

To meet the final objective, the following hypothesis was evaluated using a simple regression model.

H_a: Capacity building for M&E significantly influence performance of maternal health programmes in Kenyan County Governments.

H₀: Capacity building for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments.

Regression Model

The null hypothesis was tested using the following mathematical model:

Performance of County MHP = f (Capacity building for M&E)

$$Y = f (X_3, \varepsilon)$$

$$Y = \beta_0 + \beta_3 X_3 + \varepsilon$$

Where: Y = Performance of County Maternal Health Programmes

X₃ = Capacity building for M&E

β₀ = Constant term

β₂ = Beta coefficients

ε = Error term

Data was analyzed and the regression outcomes for the influence of capacity building for M&E on performance of maternal health programmes in Kenyan County Governments are presented in Table 4.43.

Table 4.43: Capacity building for M&E and Performance of maternal health programmes

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	0.796	0.634	0.632	1.155	
ANOVA					
Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	372.054	1	372.054	278.870	5.72E-37
1 Residual	214.798	161	1.334		
Total	586.852	162			
Regression Coefficients					

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.992	0.197		5.036	.000
	Capacity building for M&E	0.802	0.212	0.796	3.783	.000

Predictors: (constant), Capacity building for M&E
Dependent Variable: Performance of County Maternal Health Programmes

Table 4.43 shows that $r=0.796$. This indicates that capacity building for M&E has a strong relationship with performance of county MHP. $R^2 = 0.634$ indicating that capacity building for M&E explains 63.4% of the variations in the performance of maternal health programmes in Kenyan County Governments.

The overall F statistics, ($F = 278.870$, $p < 5.72E-37 < 0.05$), indicated that there was a statistically significant link amid capacity building for M&E and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was therefore rejected, and it was concluded that capacity building for M&E significantly influences performance of maternal health programmes in Kenyan County Governments.

4.8.9 Findings from Qualitative Information

As per the interviews, the County governors stated that their monitoring and evaluation staff was skilled. Majority of them also indicated that they conducted trainings after every three months. Moreover, they indicated the plans for monitoring and evaluation workforce development, which were to improve the working conditions of the stakeholders, the provision of resources and increase on the stakeholders since they are few, to produce the best data on maternal health, and to scale up the training programs to more than once a year. They also indicated that the level of IT knowledge and usage at the county was average.

The study also sought the capacity building activities that are conducted in support of M&E at the county health maternal programs. National MoH officers indicated data analysis and review meetings, M and E meetings, analysis of data meetings, trainings, apprehendships and external exposure of our staff, workshops, and support supervisions.

4.9 Data Management for M&E and Performance of maternal health programmesMHP

This section dealt with objective four of the study which sought to establish how data management for M&E influences results of County MHP in Kenya. Data management for M&E was assessed by M&E indicators selection, routine data collection, data storage & analysis, M&E information dissemination, and M&E information use.

4.9.1 M&E Indicators Selection and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements on M&E indicators selection in relation to performance of the county MHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.44.

Table 4.44: M&E Indicators Selection and Performance of County MHP

	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Dev.
The maternal health targets and indicators under UN sustainable development goals (SDGs) are monitored and tracked regularly.	30 (18.4)	23 (14.1)	25 (15.3)	75 (46.0)	10 (6.1)	3.074	0.760
Baseline assessments are conducted before any maternal health projects are implemented.	18 (11.0)	0 (0.0)	0 (0.0)	62 (38.0)	83 (50.9)	4.178	0.717

Performance indicators are identified annually and measured.	0 (0.0)	0 (0.0)	0 (0.0)	71 (43.6)	92 (56.4)	4.564	0.997
We do not rely on data for planning and setting maternal health targets.	26 (16.0)	23 (14.1)	19 (11.7)	60 (36.8)	35 (21.5)	3.337	0.880
Needs assessments are conducted before any maternal health project is started.	0 (0.0)	0 (0.0)	0 (0.0)	71 (43.6)	92 (56.4)	4.564	0.997
Sub-composite mean and standard deviation						3.943	0.870

Table 4.44 reveals the results on how data management for M&E influences performance of maternal health programmes in Kenyan County Governments. On the statement that the maternal health targets and indicators under UN sustainable development goals (SDGs) are monitored and tracked regularly, the mean was 3.074 and std.dev was 0.760. The item had a mean score lower than the overall mean of 3.943 inferring that the maternal health targets and indicators under UN sustainable development goals (SDGs) are not monitored and tracked regularly. Further, the std.dev was lower than the sub-overall std.dev of 0.870 inferring that the views converged.

On the statement that baseline assessments are conducted before any maternal health projects are implemented, the mean was 4.178 and std.dev was 0.717. The item had a mean score above the composite mean of 3.943 implying that baseline assessments are conducted before any maternal health projects are implemented. Further, the

std.dev was lower than the sub-overall std.dev of 0.870 inferring that the views converged.

Regarding the statement that performance indicators are identified annually and measured, the mean was 4.564 and std.dev was 0.997. The item had a mean score above the composite mean of 3.943 implying that performance indicators are identified annually and measured. Further, the std.dev was above the sub-composite std.dev of 0.870 suggesting that the views were inconsistent.

On the statement that the staff do not rely on data for planning and setting maternal health targets, the mean was 3.337 and std.dev was 0.880. The item had a mean score lower than the composite mean of 3.943 implying that the staff relies on data for planning and setting maternal health targets. Further, the std.dev was above the sub-composite std.dev of 0.870 implying that the views were inconsistent.

On the statement that needs assessments are conducted before any maternal health project is started, the mean was 4.564 and std.dev was 0.997. The item had a mean score above the composite mean of 3.943 implying that needs assessments are conducted before any maternal health project is started. Further, the std.dev was above the sub-composite std.dev of 0.870 implying that the opinions were inconsistent.

4.9.2 Routine Data Collection & Tools and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements on routine data collection in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.45.

Table 4.45: Routine Data Collection & Tools and Performance of County MHP

	SD	D	N	A	SA	Mean	Std.
	F	F	F	F	F		Dev.
	(%)	(%)	(%)	(%)	(%)		
There are enough data collection teams.	28	21	16	77	21	3.258	0.822
	(17.2)	(12.9)	(9.8)	(47.2)	(12.9)		

Guidelines exist for recording, collecting, collating, and reporting maternal health data.	32 (19.6)	22 (13.5)	27 (16.6)	76 (46.6)	6 (3.7)	3.012	0.942
There is M&E electronic software for efficient M&E data management.	0 (0.0)	0 (0.0)	0 (0.0)	68 (41.7)	95 (58.3)	4.583	0.995
Data collection, analysis and use is a culture in our maternal health program	26 (16.0)	24 (14.7)	20 (12.3)	73 (44.8)	20 (12.3)	3.227	0.797
There are no standard tools for maternal health data collection.	18 (11.0)	0 (0.0)	0 (0.0)	65 (39.9)	80 (49.1)	4.160	0.712
Sub-composite mean and standard deviation						3.648	0.854

Results in Table 4.45 show findings on routine data collection & tools and performance of County MHP. On the statement that there are enough data collection teams, the mean was 3.258 and std.dev was 0.822. The item had a mean score lesser than the overall mean of 3.648 implying that the data collection teams are not enough. Further, the std.dev was lesser than the sub-composite std.dev of 0.854 denoting that the views converged.

On the statement that guidelines exist for recording, collecting, collating, and reporting maternal health data, the mean was 3.012 and std.dev was 0.942. The item had a mean score lesser than the composite mean of 3.648 implying that guidelines do not exist for recording, collecting, collating, and reporting maternal health data. Further, the std.dev was above the sub-composite std.dev of 0.854 inferring that the views were inconsistent.

On the statement that there is M&E electronic software for efficient M&E data management, the mean was 4.583 and std.dev was 0.995. The item had a mean score above the composite mean of 3.648 implying that there is M&E electronic software

for efficient M&E data management. Further, the std.dev was above the sub-composite std.dev of 0.854 denoting that the views were inconsistent.

On the statement that data collection, analysis and use is a culture in the maternal health program, the mean was 3.227 and std.dev was 0.797. The item had a mean score lower than the composite mean of 3.648 implying that data collection, analysis and use is not a culture in the maternal health program. Further, the std.dev was less than the sub-composite std.dev of 0.854 denoting that the views converged.

Regarding the item, there are no standard tools for maternal health data collection, the mean was 4.160 and std.dev was 0.712. The item had a mean score above the composite mean of 3.648 implying that there are no standard tools for maternal health data collection. Further, the std.dev was less than the sub-composite std.dev of 0.854 implying that the opinions converged.

4.9.3 Data Storage & Analysis and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements on data storage & analysis in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.46.

Table 4.46: Data Storage & Analysis and Performance of maternal health programmes

	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Dev.
Data is stored in multiple methods and places to ensure there is always a copy available in case one type or location is lost or destroyed.	105 (64.4)	0 (0.0)	0 (0.0)	31 (19.0)	27 (16.6)	2.233	0.691

There are no adequate equipment & software for data, analysis, presentation and data storage.	9 (5.5)	5 (3.1)	15 (9.2)	55 (33.7)	79 (48.5)	4.166	0.584
There are adequate skills in data analysis in our department.	24 (14.7)	26 (16.0)	26 (16.0)	75 (46.0)	12 (7.4)	3.153	0.720
Patient data privacy is not a big concern and is not taken seriously.	26 (16.0)	25 (15.3)	33 (20.2)	75 (46.0)	4 (2.5)	3.037	0.665
There is no functional database for capturing and storing maternal health services data.	17 (10.4)	1 (0.6)	0 (0.0)	61 (37.4)	84 (51.5)	4.190	0.705
Sub-composite mean and standard deviation						3.356	0.673

Table 4.46 reveals results on data storage & analysis and performance of County MHP. On the statement that data is stored in multiple methods and places to ensure there is always a copy available in case one type or location is lost or destroyed, the mean was 2.233 and std.dev was 0.691. The item had a mean score lower than the cm of 3.356 denoting that data is not stored in multiple methods and places to ensure there is always a copy available in case one type or location is lost or destroyed. Further, the std.dev was above the sub-composite std.dev of 0.673 implying that the opinions were inconsistent.

On the statement that there are no adequate equipment & software for data, analysis, presentation and data storage, the mean was 4.166 and std.dev was 0.584. The item had a mean score above the composite mean of 3.356 implying that there are no adequate equipment & software for data, analysis, presentation and data storage.

Further, the std.dev was less than the sub-overall std.dev of 0.673 implying that the views converged.

On the statement that there are adequate skills in data analysis in the department, the mean was 3.153 and std.dev was 0.720. The item had a mean score lower than the composite mean of 3.356 implying that there are no adequate skills in data analysis in the department. Further, the std.dev was above the sub-composite std.dev of 0.673 implying that the opinions were inconsistent.

On the statement that patient data privacy is not a big concern and is not taken seriously, the mean was 3.037 and std.dev was 0.665. The item had a mean score lower than the composite mean of 3.356 implying that patient data privacy is a big concern and is taken seriously. Further, the std.dev was lower than the sub-composite std.dev of 0.673 implying that the opinions converged.

On the statement that there is no functional database for capturing and storing maternal health services data, the mean was 4.190 and std.dev was 0.705. The item had a mean score above the composite mean of 3.356 implying that there is no functional database for capturing and storing maternal health services data. Further, the std.dev was above the sub-composite std.dev of 0.673 implying that the opinions were inconsistent.

4.9.4 M&E Information Dissemination and Performance of maternal health programmes

The respondents were required to indicate their level of agreement with the statements on M&E information dissemination in relation to performance of the county MHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.47.

Table 4.47: M&E Information Dissemination and Performance of County MHP

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		

M&E findings are reported to donors, stakeholders and internal staff members to ensure project improvement, transparency and data-driven decision making.	17 (10.4)	28 (17.2)	21 (12.9)	31 (19.0)	66 (40.5)	3.620	0.924
Display of data for monitoring their targets on charts and graphs happens.	15 (9.2)	18 (11.0)	5 (3.1)	33 (20.2)	92 (56.4)	4.037	0.869
Critical review which encourages the use of data for learning, performance improvement, and decision-making exists.	12 (7.4)	6 (3.7)	8 (4.9)	113 (69.3)	24 (14.7)	3.804	0.987
We do not share data information with the national maternal health program.	5 (3.1)	6 (3.7)	6 (3.7)	65 (39.9)	81 (49.7)	4.295	0.936
Information products e.g. newsletters, reports etc. are regularly sent to a wide variety of stakeholders.	26 (16.0)	20 (12.3)	28 (17.2)	73 (44.8)	16 (9.8)	3.203	0.753
Sub-composite mean and standard deviation						3.792	0.894

According to the outcomes in Table 4.48, on the statement that to promote project improvement, openness, and data-driven decision making, M&E findings are shared with donors, stakeholders, and internal personnel, the mean was 3.620 and std.dev was 0.924. The item had a mean score lower than the composite mean of 3.792 implying that to promote project improvement, openness, and data-driven decision making, M&E findings are shared with donors, stakeholders, and internal personnel. Further, the std.dev was above the sub-composite std.dev of 0.894 suggesting that the views were inconsistent.

On the statement that display of data for monitoring their set targets on charts and graphs happens, the mean was 4.037 and std.dev was 0.869. The item had a mean score above the composite mean of 3.792 implying that display of data for monitoring their set targets on charts and graphs happens. Further, the std.dev was less than the sub-composite std.dev of 0.894 implying that the opinions converged.

On the statement that there is a critical review that encourages the use of data for learning, improvement, and decision-making, the mean was 3.804 and std.dev was 0.987. The item had a mean score above the composite mean of 3.792 implying that there is a critical review that encourages the use of data for learning, improvement, and decision-making. Further, the std.dev was above the sub-overall std.dev of 0.894 implying that the opinions were inconsistent.

On the statement that the staff do not share data and information with the national maternal health program, the mean was 4.295 and std.dev was 0.936. The item had a mean score above the composite mean of 3.792 implying that the staff share data and information with the national maternal health program. Further, the std.dev was above the sub-composite std.dev of 0.894 implying that the opinions were inconsistent.

Regarding the statement that information products e.g. newsletters, reports etc. are regularly sent to a wide variety of stakeholders, the mean was 3.203 and std.dev was 0.753. The item had a mean score lower than the composite mean of 3.792 implying that the information products e.g. newsletters, reports etc. are not regularly sent to a wide variety of stakeholders. Further, the std.dev was lower than the sub-overall std.dev of 0.894 implying that the opinions converged.

4.9.5 M&E Information Use and Performance of maternal health programmes

The respondents were required to indicate their level of agreement with the statements on M&E information use in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.49.

Table 4.48: M&E Information Use and Performance of County MHP

	SD	D	N	A	SA	Mean	Std.
	F	F	F	F	F		Dev.
	(%)	(%)	(%)	(%)	(%)		
Decisions are based on evidence/facts, data and health information.	8 (4.9)	8 (4.9)	8 (4.9)	50 (30.7)	89 (54.6)	4.252	0.585
Data sharing processes exist with the national M&E system as well as international donors and agencies.	3 (1.8)	4 (2.5)	8 (4.9)	27 (16.6)	121 (74.2)	4.589	0.844
At the facility, there are no criteria for data analysis, display, or use (e.g. graphs on walls showing cumulative coverage)	11 (6.7)	13 (8.0)	17 (10.4)	52 (31.9)	70 (42.9)	3.963	0.712
We do not use health information system data to make decisions.	16 (9.8)	16 (9.8)	17 (10.4)	64 (39.3)	50 (30.7)	3.712	0.770
Evidence from the various MCH programs in the county is used to influence policy.	9 (5.5)	11 (6.7)	12 (7.4)	64 (39.3)	67 (41.1)	4.037	0.622
Sub-composite mean and standard deviation						4.111	0.707

Table 4.49 shows findings on M&E information use and performance of County MHP. On the statement that decisions are based on evidence/facts, data and health information, the mean was 4.252 and std.dev was 0.585. The item had a mean score above the composite mean of 4.111 implying that the decisions are based on evidence/facts, data and health. Further, the std.dev was less than the sub-overall std.dev of 0.707 implying that the views converged.

On the statement that data sharing processes exist with the national M&E system as well as international donors and agencies, the mean was 4.589 and std.dev was 0.844. The item had a mean score above the composite mean of 4.111 implying that data sharing processes exist with the national M&E system as well as international donors

and agencies. Further, the std.dev was above the sub-composite std.dev of 0.707 denoting that the opinions were varying.

On the statement that there are no guidelines to support the analysis, presentation and use of data at the facility (e.g. graphs on walls showing cumulative coverage), the mean was 3.963 and std.dev was 0.712. The item had a mean score lower than the overall mean of 4.111 implying that there are guidelines to support the analysis, presentation and use of data at the facility (e.g. graphs on walls showing cumulative coverage). Further, the std.dev was above the sub-overall std.dev of 0.707 denoting that the opinions were varied.

On the statement that staff do not use health information system data to make decisions, the mean was 3.712 and std.dev was 0.770. The item had a mean score lower than the composite mean of 4.111 implying that staff uses health information system data to make decisions. Further, the std.dev was above the sub-composite std.dev of 0.707 denoting that the views were inconsistent.

On the statement that evidence from the various MCH programs in the county is used to influence policy, the mean was 4.037 and std.dev was 0.622. The item had a mean score lower than the composite mean of 4.111 implying that evidence from the various MCH programs in the county is not used to influence policy. Further, the std.dev was less than the sub-composite std.dev of 0.707 implying that the opinions converged.

4.9.6 Overall Descriptive Analysis of Data Management for M&E

The overall data management for M&E was measured in terms of M&E indicators selection, routine data collection, data storage & analysis, M&E information dissemination, and M&E information use. The cm and std.dev of these factors are shown in Table 4.50.

Table 4.49: Means and Standard Deviations of Data Management for M&E

Variable Dimension/Indicator	Sub-composite Mean (M)	Sub-composite Std. Dev.
M&E indicators selection	3.943	0.870
Routine data collection	3.648	0.854
Data storage & analysis	3.356	0.673
M&E information dissemination	3.792	0.894
M&E information use	4.111	0.707

Composite mean and standard deviation	3.770	0.800
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Results in Table 4.50 indicate that the overall or composite mean of data management for M&E was 3.770. The most dominant indicator was M&E information use (M=4.111) whereby the study findings revealed that decisions were based on evidence/facts, data and health information, there were also procedures for data sharing with the national M&E system and international donors and agencies, there were guidelines to support the analysis, presentation and use of data at the facility (e.g. graphs on walls showing cumulative coverage), and the staff used health information system data to make decisions. However, evidence from the various MCH programs in the county was not used to influence policy. Views on this dimension converged given the sub composite std.dev of 0.707 was below the composite std.dev of 0.800.

M&E indicators selection (M=4.121) was also found to influence performance of the county MHP. This was shown by baseline assessments being conducted, performance indicators being identified annually and measured, the staff relying on data for planning and setting maternal health targets, and needs assessments being conducted before any maternal health project is started. However, the maternal health targets and indicators under UN sustainable development goals (SDGs) were not monitored and tracked regularly. Views appeared to diverge given the sub composite std.dev of 0.870 was above the composite std.dev of 0.800.

For the dimension, M&E information dissemination a mean score of 3.792 was achieved. It was evident that they displayed of data for monitoring their set targets on charts and graphs, a critical review was done to encourage the use of data for learning, performance enhancement, and decision-making, and the staff share data and information with the national maternal health program. However, the information products e.g. newsletters, reports etc. were not regularly sent to a wide variety of stakeholders. Views on this dimension diverged given because the sub composite std.dev of 0.894 was above the composite std.dev of 0.800.

Routine data collection (M=3.648) was not achieved. This could be seen by the inadequate data collection teams, inexistence of guidelines or recording, collecting, collating, and reporting maternal health data, lack of data collection, analysis and use culture in the maternal health program, and lack of standard tools for maternal health data collection. However, there was M&E electronic software for efficient M&E data

management. Views on this dimension diverged given because the sub composite std.dev of 0.854 was above than the composite std.dev of 0.800.

The dimension, data storage & analysis (M=3.664) was not achieved. It was evident since data was not stored in multiple methods and places to ensure there is always a copy available in case one type or location is lost or destroyed, inadequate equipment & software for data, analysis, presentation and data storage, in adequate skills in data analysis in the department, and lack of functional database for capturing and storing maternal health services data. However, patient data privacy was a big concern and was taken seriously. Views on this dimension converged given because the sub composite std.dev of 0.673 was lower than the composite std.dev of 0.800.

4.9.7 Correlation between Data Management for M&E and Performance of County MHP

The purpose of the analysis was to determine the direction and size of the relationship between the investigated predictor and response variables. This was linked with the fourth objective which was to assess how data management for M&E influences performance of maternal health programmes in Kenyan County Governments. The results are presented in Table 4.51.

Table 4.50: Correlation between Data Management for M&E and Performance of maternal health programmes

		Data Management for M&E
Performance of maternal health programmes	Pearson Correlation	0.855
	Sig. (2-tailed)	0.042

Table 4.50 indicate strong correlation between the performance of County MHP and data management for M&E ($r=0.855$, $p=0.042 < 0.05$). There therefore a strong correlation between the results of county MHP and data management for M&E.

4.9.8 Regression Analysis of Influence of Data Management for M&E on Performance of County MHP

Moreover, the study conducted linear regression analysis to establish how data management for M&E influences performance of maternal health programmes in Kenyan County Governments. The fourth hypothesis was also investigated by

gathering data on data management for M&E variables from respondents, then generating and applying the composite index in the analysis. The following hypothesis was developed and tested in accordance with objective four.

4.9.8.1 Hypothesis Testing

To meet the fourth aim, the following hypothesis was evaluated using a simple regression model.

H_a: Data management for M&E significantly influences performance of maternal health programmes in Kenyan County Governments.

H₀: Data management for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments.

Regression Model

The null hypothesis was tested using the following mathematical model:

Performance of County MHP = f (Data Management for M&E)

$$Y = f(X_4, \varepsilon)$$

$$Y = \beta_0 + \beta_4 X_4 + \varepsilon$$

Where: Y = Performance of County Maternal Health Programmes

X₄ = Data Management for M&E

β₀ = Constant term

β₄ = Beta coefficients

ε = Error term

Data was analyzed and the outcomes for the influence of data management for M&E on performance of maternal health programmes in Kenyan County Governments are presented in Table 4.52.

Table 4.51: Data Management for M&E and Performance of maternal health programmes

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	0.855	0.730	0.729	1.240		
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig
Regression		671.009	1	671.009	436.308	1.07E-47
1 Residual		247.606	161	1.538		
Total		918.615	162			

		Regression Coefficients				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.917	0.208		4.409	.000
	Data Management for M&E	0.911	0.265	0.855	3.438	.001

Predictors: (constant), Stakeholder identification, Goals and objectives, Feasibility studies, Needs assessment, Data Management for M&E
Dependent Variable: Performance of County Maternal Health Programmes

Table 4.52 shows that $r=0.855$. This indicates that data management for M&E has a strong relationship with performance of maternal health programmes in Kenyan County Governments. $R^2 = 0.729$ suggesting that Data Management for M&E describes 72.9% of the variations in the performance of maternal health programmes in Kenyan County Governments.

The overall F statistics, ($F = 436.308$, $p < 1.07E-47 < 0.05$), indicated that there was a statistically significant relationship between data management for M&E and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was thus rejected and it was resolved that data management for M&E significantly influences performance of maternal health programmes in Kenyan County Governments.

4.9.9 Findings from Qualitative Information

The key informants were required to indicate how often maternal health data collected was and how it was collected. Majority of the respondents noted that they collected maternal health data monthly and that the data was analyzed and displayed through tables, charts, graphs and trends.

Moreover, the study found that the data was disseminated to numerous stakeholders through the use of the KDHS2, workshops and report feedbacks. The medical superintendents also indicated that they use data and information gathered to make maternal health decisions. The hospital administrators were also asked to indicate the problems they face in the execution of M&E at the county maternal health programs. They indicated the lack of enough accessibility to internet, inadequate infrastructure

for M&E, inadequate resources for implementation of goals and objectives of maternal data, and lack of adequately trained personnel.

The CHMT members were further required to indicate recommendations they would give towards implementation of M&E for county maternal health programs. They indicated providing enough internet to facilities for proper reporting of data, investing in qualified manpower, developing departments in each health facilities specifically handing that, consultation of needs before budgeting, and promoting teamwork and synergy in implementation. One National MoH officer said:

“By ensuring that managers are prepared to design tools, instruments and methodologies required to gather the needed information. There is a need to strengthen the skills of those responsible for the collection and analysis of data that is used to generate local evidence. Similarly, the resources required for addressing identified problems also need to be expanded so as to enlarge the decision-making space for key implementers and decision-makers.”

A County delivery unit member noted:

“By providing adequate resources, addition of more stakeholders and provision of network to facilities to ensure data is well reported and in time. Moreover, there is need to ensure active involvement of local stakeholders in the implementation of the projects so that they can move from being passive supporters to active drivers of the work”

4.10 Combined Monitoring and evaluation Influence Performance of maternal health programmes in Kenyan County Governments

The fifth objective of this study was to examine how combined M&E practices influence performance of maternal health programmes in Kenyan County Governments. The combination of planning for M&E, stakeholder engagement, capacity building for M&E, M&E data use was referred to as combined M&E practices. The combined influence of these factors on performance of maternal health programmes was tested using inferential statistics.

4.10.1 Correlation between Combined Monitoring and evaluation and Performance of County MHP

Correlational analysis of combined M&E practices as the independent variable and performance of county MHP as the response variable was conducted to examine the strength and direction of the association. The results are presented in Table 4.53.

Table 4.52: Correlation between Monitoring and evaluation and Performance of County MHP

		Planning for M&E	Stakeholder Engagement for M&E	Capacity building for M&E	Data Management for M&E
Performance of County MHP	Pearson Correlation Sig. (2- tailed)	0.859 .023	0.838 .001	0.796 .028	0.855 0.042

Outcomes in Table 4.53 show positive and significant coefficients amid the variables. Planning for M&E had a strong and positive correlation on performance of county MHP ($r=0.859$, $p=0.023$), stakeholder engagement for M&E and performance of county MHP were strongly and positively correlated ($r=0.838$, $p=0.001$), capacity building for M&E and performance of County MHP were also strongly and positively correlated ($r=0.796$, $p=0.028$) while data management for M&E and performance of County MHP were established to have a robust and positive correlation ($r=0.855$, $p=0.042$). This is a sign that combining monitoring and evaluation had a positive influence on performance of maternal health programmes in Kenyan County Governments.

4.10.2 Regression Analysis of Influence of Combined Monitoring and evaluation on Performance of maternal health programmes

In addition, multiple regression analysis was carried out in order to investigate how combined monitoring and evaluation techniques influence the performance of maternal health programmes in Kenya, as part of objective five. For each of the variables, a composite index was calculated and used in the hypothesis testing. The linear regression was used to test the null hypothesis in line with objective five.

4.10.2.1 Hypothesis Testing

To meet the fifth aim, the following hypothesis was evaluated using a simple regression model.

Ha: Combined monitoring and evaluation significantly influence performance of maternal health programmes in Kenyan County Governments.

H0: Combined monitoring and evaluation doesn't significantly influence performance of maternal health programmes in Kenyan County Governments

Regression Model

The null hypothesis was tested using the following mathematical model:

Performance of County MHP = f (planning for M&E, stakeholders engagement in M&E, capacity building for M&E and Data Management for M&E)

$$Y = f(X_1, X_2, X_3, X_4, \varepsilon)$$

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where Y = Performance of County Maternal Health Programmes

X₁ = Planning for M&E

X₂ = Stakeholders engagement in M&E

X₃ = Capacity building for M&E

X₄ = Data management for M&E

β₀ = Constant term

β₁, β₂, β₃ and β₄ = Beta coefficients

ε = Error term

Data was analyzed and the regression outcomes for the influence of combined M&E practices on performance of maternal health programmes in Kenyan County Governments are shown in Table 4.54.

Table 4.53: Combined Monitoring and evaluation and Performance of County MHP

Model Summary						
Model	R	R Square	Adjusted R Square		Std. Error of the Estimate	
1	0.849	0.721	0.714		1.490	
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	921.983	4	230.496	101.895	1.02E-42
	Residual	357.41	158	2.262		
	Total	1279.393	162			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.267	0.182		6.962	.001
	Planning for M&E	0.889	0.143	0.859	6.217	.014
	Stakeholder engagement for M&E	0.895	0.245	0.838	3.653	.013
	Capacity building for M&E	0.802	0.212	0.796	3.783	.007
	Data Management for M&E	0.911	0.265	0.855	3.438	.016
Predictors: (constant), Planning for M&E, Stakeholder Engagement for M&E, Capacity Building for M&E, Data Management for M&E						
Dependent Variable: Performance of County Maternal Health Programmes						

Table 4.54 shows that $r=0.849$. This indicates that combined M&E practices have a strong link with performance of maternal health programmes in Kenyan County Governments. $R^2 = 0.721$ indicating that combined monitoring and evaluation explain 72.1% of the variations in the performance of maternal health programmes in Kenyan County Governments. The results on test of significance also indicate that; planning for M&E ($\beta=0.859$, $p<0.014$), stakeholders engagement in M&E ($\beta=0.838$, $p<0.013$), capacity building for M&E ($\beta=0.796$, $p=0.007$), data management for M&E ($\beta=0.855$, $p=0.016$) were all-significant at $p<0.05$ and 95% confidence level. This result means that combined monitoring and evaluation explain 72.1% of the variations in the performance of maternal health programmes in Kenyan County Governments.

The overall F statistics, ($F =101.895$, $p<1.02E-42<0.05$), indicated that there was a statistically significant relationship between combined practices for M&E and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was thus rejected, and it was resolved that combination of M&E practices significantly influences performance of maternal health programmes in Kenyan County Governments.

The regression model can be substituted as follows using the statistical data in Table 4.53:

$$Y = 1.267 + 0.859X_1 + 0.838X_2 + 0.796X_3 + 0.855X_4$$

Where: X1 = Planning for M&E

X2 = Stakeholders engagement in M&E

X3 = Capacity building for M&E

X4 = Data Management for M&E

4.11 Contextual Determinants and Performance of County MHP

This section covered objective six of the study which aimed to establish how contextual determinants influence performance of maternal health programmes in Kenyan County Governments. Contextual determinants were assessed by organizational structure, organizational culture, political-legal environment, communication structure, and organizational strategy.

4.11.1 Organizational Structure and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements on organizational structure in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.55.

Table 4.54: Organizational Structure and Performance of County MHP

	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Dev.
Employees and beneficiaries easily access section heads	0 (0.0)	0 (0.0)	0 (0.0)	68 (41.7)	95 (58.3)	4.583	0.995
Our organizational structure supports M&E system.	12 (7.4)	32 (19.6)	30 (18.4)	55 (33.7)	34 (20.9)	3.411	0.726
Supervisors are not empowered to make decisions at their level.	25 (15.3)	10 (6.1)	26 (16.0)	90 (55.2)	12 (7.4)	3.331	0.692

There is an organogram with clearly defined roles and responsibilities.	27 (16.6)	17 (10.4)	30 (18.4)	77 (47.2)	12 (7.4)	3.184	0.728
The entire management team is highly effective.	0 (0.0)	0 (0.0)	0 (0.0)	73 (44.8)	90 (55.2)	4.552	0.999
Sub-composite mean and standard deviation						3.812	0.828

Table 4.55 reveals the results on how organizational structure influence performance of maternal health programmes in Kenyan County Governments. On the statement that employees and beneficiaries easily access section heads, the mean was 4.583 and std.dev was 0.995. The item had a mean score above the cm of 3.812 implying that employees and beneficiaries easily access section heads. Further, the std.dev was more than the sub-composite std.dev of 0.828 suggesting that the views were varied.

About the organizational structure supports M&E system, the mean was 3.411 and std.dev was 0.726. The item had a mean score lower than the cm of 3.812 implying that the organizational structure does not support the M&E system. Further, the std.dev was below the sub-composite std.dev of 0.828 implying that the views converged.

About supervisors are not empowered to make decisions at their level, the mean was 3.331 and std.dev was 0.692. The item had a mean score lower than the cm of 3.812 implying that supervisors are empowered to make decisions at their level. Further, the std.dev was smaller than the sub-composite std.dev of 0.828 inferring that the opinions converged.

On the statement that there is an organogram with clearly defined roles and responsibilities, the mean was 3.184 and std.dev was 0.728. The item had a mean score lower than the cm of 3.812 implying that there is no organogram with clearly defined roles and responsibilities. Further, the std.dev was lower than the sub-composite std.dev of 0.828 suggesting that the views converged.

On the statement that the entire management team is highly effective, the mean was 4.552 and std.dev was 0.999. The item had a mean score above the cm of 3.812

implying that the entire management team is highly effective. Further, the std.dev was greater than sub-composite std.dev of 0.828 inferring that the views were inconsistent.

4.11.2 Organizational Culture and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements on organizational culture in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.56.

Table 4.55: Organizational Culture and Performance of maternal health programmes

	SD	D	N	A	SA	Mean	Std.
	F	F	F	F	F		Dev.
	(%)	(%)	(%)	(%)	(%)		
Corruption is regularly practiced in our department.	11 (6.7)	0 (0.0)	7 (4.3)	72 (44.2)	73 (44.8)	4.203	0.531
This department is very supportive of and adaptable to change.	0 (0.0)	0 (0.0)	0 (0.0)	73 (44.8)	90 (55.2)	4.552	0.999
We do not have a list of core values.	0 (0.0)	0 (0.0)	0 (0.0)	64 (39.3)	99 (60.7)	4.607	0.990
Either gossip, rumors, ridicule, harassment, bullying, indifference, lack of support, cliques or 'in' groups, is practiced in our department.	0 (0.0)	0 (0.0)	0 (0.0)	75 (46.0)	88 (54.0)	4.540	0.600
Ethical behavior such as respect for rules and procedures, sanctioning of unethical behaviors, pride in work is practiced.	0 (0.0)	0 (0.0)	0 (0.0)	72 (44.2)	91 (55.8)	4.558	0.998
Sub-composite mean and standard deviation						4.492	0.824

Results in Table 4.56 relate to organizational culture and performance of County MHP. On the statement that corruption is regularly practiced in the department, the mean was 4.203 and std.dev was 0.531. The item had a mean score lower than the overall mean of 4.492 implying that corruption was not regularly practiced in the

department. Further, the std.dev was below the sub-composite std.dev of 0.824 denoting that the opinions converged.

On the statement that this department is very supportive of and adaptable to change, the mean was 4.552 and std.dev was 0.999. The item had a mean score above the cm of 4.492 implying that this department is very supportive of and adaptable to change. Further, the std.dev was higher than sub-overall std.dev of 0.824 suggesting that the views were inconsistent.

On staff do not have a list of core values, the mean was 4.607 and std.dev was 0.990. The item had a mean score above the cm of 4.492 implying that staff doesn't have a list of core values. Further, the std.dev was above the sub-overall std.dev of 0.824 implying that the views were inconsistent.

On the statement that either gossip, rumors, ridicule, harassment, bullying, indifference, lack of support, cliques or 'in' groups, is practiced in the department, the mean was 4.540 and std.dev was 0.600. The item had a mean score above the composite mean of 4.492 implying that either gossip, rumors, ridicule, harassment, bullying, indifference, lack of support, cliques or 'in' groups, is practiced in the department. Further, the std.dev was below the sub-composite std.dev of 0.824 meaning that the views converged.

On the statement that ethical behavior such as respect for rules and procedures, sanctioning of unethical behaviors, pride in work is practiced, the mean was 4.558 and std.dev was 0.998. The item had a mean score above the cm of 4.492 implying that ethical behavior such as respect for rules and procedures, sanctioning of unethical behaviors, pride in work is practiced. Further, the std.dev was higher than sub-composite std.dev of 0.824 inferring that the views were inconsistent.

4.11.3 Political-Legal Environment and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements political-legal environment in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.57.

Table 4.56: Political-Legal Environment and Performance of County MHP

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
Political interference, lack of political goodwill affects implementation of M&E practices.	19 (11.7)	12 (7.4)	21 (12.9)	40 (24.5)	71 (43.6)	3.810	0.872
There is no legal framework at the county level that mandates M&E for county projects.	25 (15.3)	28 (17.2)	20 (12.3)	81 (49.7)	9 (5.5)	3.129	0.723
There's no clarity on who is to carry out M&E- confusion on oversight and M&E and who should do what.	0 (0.0)	0 (0.0)	0 (0.0)	68 (41.7)	95 (58.3)	4.583	0.995
M&E is an audit tool to audit mismanagement and poor performance.	14 (8.6)	11 (6.7)	10 (6.1)	42 (25.8)	86 (52.8)	4.074	0.779
There is no goodwill by county administration on implementation of county integrated M&E system (CIMES).	0 (0.0)	0 (0.0)	0 (0.0)	72 (44.2)	91 (55.8)	4.558	0.998
Sub-composite mean and standard deviation						4.031	0.873

Table 4.57 reveals results on political-legal environment and performance of County MHP. On the statement that political interference, lack of political goodwill affects implementation of M&E practices, the mean was 3.810 and std.dev was 0.872. The item had a mean score lower than the cm of 4.031 implying that political interference, lack of political goodwill do not affect implementation of M&E practices. Further, the std.dev was lesser than the sub-composite std.dev of 0.873 denoting that the opinions converged.

On the statement that there is no legal framework at the county level that mandates M&E for county projects, the mean was 3.129 and std.dev was 0.723. The item had a mean score lower than the composite mean of 4.031 inferring that there is a legal framework at the county level that mandates M&E for county projects. Further, the std.dev was below the sub-composite std.dev of 0.873 meaning that the opinions converged.

On the statement that there's no clarity on who is to carry out M&E- confusion on oversight and M&E and who should do what, the mean was 4.583 and std.dev was 0.995. The item had a mean score above the cm of 4.031 implying that there's no clarity on who is to carry out M&E- confusion on oversight and M&E and who should do what. Further, the std.dev was above the sub-composite std.dev of 0.873 suggesting that the views were inconsistent.

On the statement that M&E is an audit tool to audit mismanagement and poor performance, the mean was 4.074 and std.dev was 0.779. The item had a mean score above the cm of 4.031 implying that the M&E is an audit tool to audit mismanagement and poor performance. Further, the std.dev was lesser than the sub-composite std.dev of 0.873 implying that the views converged.

On the statement that there is no goodwill by county administration on implementation of county integrated M&E system (CIMES), the mean was 4.558 and std.dev was 0.998. The item had a mean score above the cm of 4.031 implying that there is no goodwill by county administration on implementation of county integrated M&E system (CIMES). Further, the std.dev was above the sub-composite std.dev of 0.873 meaning that the views were inconsistent.

4.11.4 Communication Structure and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements communication Structure in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.58.

Table 4.57: Communication Structure and Performance of maternal health programmes

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
There is a clearly defined structure for communication	8 (4.9)	4 (2.5)	22 (13.5)	84 (51.5)	45 (27.6)	3.945	0.977
Communicating decisions is efficient in our maternal health program.	10 (6.1)	12 (7.4)	18 (11.0)	48 (29.4)	75 (46.0)	4.018	0.694
Feedback is always received from communications made.	9 (5.5)	7 (4.3)	11 (6.7)	30 (18.4)	106 (65.0)	4.331	0.633
We hold departmental meetings at least every month.	7 (4.3)	12 (7.4)	9 (5.5)	26 (16.0)	109 (66.9)	4.337	0.640
Communication channels are very open here among management and workers.	19 (11.7)	24 (14.7)	24 (14.7)	35 (21.5)	61 (37.4)	3.583	0.913
Sub-composite mean and standard deviation						4.043	0.771

Results in Table 4.58 relate to communication structure and performance of CMHP. On the statement that there is a clearly defined structure for communication, the mean was 3.945 and std.dev was 0.977. The item had a mean score lesser than the cm of 4.043 meaning that there is no clearly defined structure for communication. Further, the std.dev was above the sub-overall std.dev of 0.771 implying that the opinioivewsns were inconsistent.

On the statement that communicating decisions is efficient in the maternal health program, the mean was 4.018 and std.dev was 0.694. The item had a mean score lower than the cm of 4.043 implying that communicating decisions are not efficient in the

maternal health program. Further, the std.dev was lesser than the sub-composite std.dev of 0.771 suggesting that the views converged.

On the statement that feedback is always received from communications made, the mean was 4.331 and std.dev was 0.633. The item had a mean score above the composite mean of 4.043 implying that feedback is always received from communications made. Further, the std.dev was lesser than the sub-composite std.dev of 0.771 suggesting that the opinions converged.

Regarding the statement that the staff holds departmental meetings at least every month, the mean was 4.337 and std.dev was 0.640. The item had a mean score above the cm of 4.043 implying that the staff holds departmental meetings at least every month. Further, the std.dev was lower than the sub-overall std.dev of 0.771 implying that the views converged.

On the item, communication channels are very open here among management and workers, the mean was 3.583 and std.dev was 0.913. The item had a mean score lower than the cm of 4.043 implying that communication channels are not very open here among management and workers. Further, the std.dev was above the sub-composite std.dev of 0.771 implying that the views were inconsistent.

4.11.5 Organizational Strategy and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements organizational strategy in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.59.

Table 4.58: Organizational Strategy and Performance of maternal health programmes

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
Our county maternal health program doesn't have a clear strategic plan.	116 (71.2)	12 (7.4)	12 (7.4)	13 (8.0)	10 (6.1)	1.706	0.757
I am not familiar with the organizational vision & mission.	24 (14.7)	32 (19.6)	22 (13.5)	40 (24.5)	45 (27.6)	3.307	0.933
We are well aligned with the united nations SDGS, MoH Kenya, and county maternal health goals.	28 (17.2)	23 (14.1)	25 (15.3)	43 (26.4)	44 (27.0)	3.319	0.943
Everyone here is clear on what drives our success as a department.	13 (8.0)	34 (20.9)	24 (14.7)	30 (18.4)	62 (38.0)	3.577	0.883
Our department assesses its strengths, weaknesses, opportunities, and threats in order to understand the current operating climate.	23 (14.1)	25 (15.3)	24 (14.7)	47 (28.8)	44 (27.0)	3.393	0.894
Sub-composite mean and standard deviation						3.060	0.882

The findings in Table 4.59 relate to organizational strategy and performance of maternal health programmes. On the statement that the county MHP doesn't have a clear strategic plan, the mean was 1.706 and std.dev was 0.757. The item had a mean score lower than the cm of 3.060 implying that the county maternal health program

has a clear strategic plan. Further, the std.dev was lesser than the sub-composite std.dev of 0.882 suggesting that the views converged.

On the statement that the staff is not familiar with the organizational vision & mission, the mean was 3.307 and std.dev was 0.933. The item had a mean score above the composite mean of 3.060 inferring that the staff is not familiar with the organizational vision & mission. Further, the std.dev was greater than the sub-composite std.dev of 0.882 inferring that the views were inconsistent.

On the statement that the staff are well aligned with the United Nations SDGS, MoH Kenya, and county maternal health goals, the mean was 3.319 and std.dev was 0.943. The item had a mean score above the cm of 3.060 implying that the staff is well aligned with the United Nations SDGS, MoH Kenya, and county maternal health goals. Further, the std.dev was above the sub-composite std.dev of 0.882 implying that the opinions were inconsistent.

On the statement that everyone here is clear on what drives the success as a department, the mean was 3.577 and std.dev was 0.883. The item had a mean score above the cm of 3.060 implying that everyone here is clear on what drives the success as a department. Further, the std.dev was above the sub-composite std.dev of 0.882 inferring that the views were inconsistent.

On the statement that the department assesses its strengths, weaknesses, opportunities, and threats in order to understand the current operating climate, the mean was 3.393 and std.dev was 0.894. The item had a mean score above the cm of 3.060 implying that the department assesses its strengths, weaknesses, opportunities, and threats in order to understand the current operating climate. Further, the std.dev was above the sub-composite std.dev of 0.882 suggesting that the views were inconsistent.

4.11.6 Overall Descriptive Analysis of Contextual Determinants

The overall contextual determinants were measured in terms of organizational structure, organizational culture, political-legal environment, communication structure, and organizational strategy. The cm and std.dev of these factors are shown in Table 4.60.

Table 4.59: Means and Standard Deviations of Contextual Determinants

Variable Dimension/Indicator	Sub-composite	Sub-composite
	Mean (M)	Std. Dev.
Organizational structure	3.812	0.828
Organizational culture	4.492	0.824
Political-legal environment	4.031	0.873
Communication structure	4.043	0.771
Organizational strategy	3.060	0.882
Composite mean and standard deviation	3.888	0.836

Results in Table 4.59 indicate that the composite mean of contextual determinants was 3.888. The most leading indicator was organizational culture (M=4.492) whereby the study outcomes revealed that corruption was not regularly practiced, this department was very supportive of and adaptable to change, and ethical behavior such as respect for rules and procedures, sanctioning of unethical behaviors, pride in work was practiced. However, gossip, rumors, ridicule, harassment, bullying, indifference, lack of support, cliques or 'in' groups, were practiced in the department, and the staff did not have a list of core values. Views on this dimension converged given the sub overall std.dev of 0.824 was lesser than the overall std.dev of 0.836.

Communication structure (M=4.043) was also found to influence performance of the county MHP. This was shown by the feedback always received from communications made, and the staff holding departmental meetings at least every month. However, there was no clearly defined structure for communication, communicating decisions were not efficient in the maternal health program, and communication channels were not very open here among management and workers. Views seemed to converge given the sub overall std.dev of 0.771 was less than the overalls std.dev of 0.836.

The dimension, political-legal environment (M=4.031) was achieved. It was evident that political interference, lack of political goodwill did not affect implementation of M&E practices, there was a legal framework at the county level that mandates M&E for county projects, and the M&E was an audit tool to audit mismanagement and poor performance. However, there was no clarity on who was to carry out M&E- confusion on oversight and M&E and who should do what, and there was no goodwill by county administration on implementation of county integrated M&E system (CIMES). Views

on this dimension converged given because the sub overall std.dev of 0.771 was below the overall std.dev of 0.836.

Organizational structure (M=3.812) was not achieved. This could be seen by the organizational structure not supporting the M&E system, and there being no organogram with clearly defined roles and responsibilities. However, employees and beneficiaries could easily access section heads, supervisors were empowered to make decisions at their level, and the entire management team was highly effective. Views on this dimension converged given because the sub overall std.dev of 0.828 was less than the overall std.dev of 0.836.

The dimension, organizational strategy (M=3.060) was not achieved. It was evident since the staff was not familiar with the organizational vision & mission. However, the department assessed its strengths, weaknesses, chances, and threats in order to understand the current operating climate, everyone was clear on what drives the success as a department, the staff was well aligned with the United Nations SDGS, MoH Kenya, and county maternal health goals, and the county maternal health program had a clear strategic plan. Views on this dimension diverged given because the sub overall std.dev of 0.882 was above than the overall std.dev of 0.836.

4.11.7 Correlation between Contextual Determinants and Performance of County MHP

The purpose of the analysis was to determine the direction and size of the relationship between the investigated variables. This linked with the sixth goal of this research which was establish how contextual determinants influences performance of maternal health programmes in Kenyan County Governments. The results are presented in Table 4.61.

Table 4.60: Correlation between Contextual Determinants and Performance of maternal health programmes

		Contextual Determinants
Performance of maternal health programmes	Pearson Correlation	0.638
	Sig. (2-tailed)	.000

Table 4.61 shows a strong correlation amid the performance of CMHP and contextual determinants had $r=0.638$ and $p=0.000$ which was below 0.05 therefore suggesting that

it was significant. There was therefore a strong correlation between the performance of CMHP and contextual determinants.

4.11.8 Regression Analysis of Influence of Contextual Determinants on Performance of County MHP

The sixth hypothesis was also tested by obtaining data from the participants on contextual determinants and then computing and using composite index in the analysis. The following hypothesis was developed and tested in accordance with goal six.

4.11.8.1 Hypothesis Testing

To meet the sixth aim, the following hypothesis was evaluated using simple regression.

H_a: Contextual determinants significantly influence performance of maternal health programmes in Kenyan County Governments.

H₀: Contextual determinants do not significantly influence performance of maternal health programmes in Kenyan County Governments.

Regression Model

The mathematical model used for testing the null hypothesis was as follows:

Performance of maternal health programmes = f (Contextual determinants)

$$Y = f(X_6, \varepsilon)$$

$$Y = \beta_0 + \beta_6 X_6 + \varepsilon$$

Where: Y = Performance of County Maternal Health Programmes

X₆ = Contextual determinants

β₀ = Constant term

β₆ = Beta coefficients

ε = Error term

Data was analyzed and the regression outcomes for the influence of contextual determinants on performance of maternal health programmes in Kenyan County Governments are demonstrated in Table 4.62.

Table 4.61: Contextual Determinants and Performance of CMHP

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	0.877	0.768	0.767	1.264		
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
Regression		853.353	1	853.353	533.739	5.46E-53
Residual		257.41	161	1.599		
Total		1110.763	162			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error			
1	(Constant)	0.813	0.227		3.581	0.000
	Contextual determinants	0.901	0.293	0.877	3.075	0.002

Predictors: (constant), Contextual determinants
Dependent Variable: Performance of County Maternal Health Programmes

Table 4.62 denotes that $r=0.877$. This implies that contextual determinants have a strong link with performance of maternal health programmes in Kenyan County Governments. $R^2 = 0.768$ demonstrating that contextual determinants explains 76.8% of the disparities in the performance of maternal health programmes in Kenyan County Governments.

The overall F statistics, ($F = 533.739$, $p < 5.46E-53 < 0.05$), noted that there was a statistically significant relationship between contextual determinants and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was thus rejected and it was concluded that contextual determinants significantly influences performance of maternal health programmes in Kenyan County Governments.

4.12 Behavioural Determinants and Performance of County MHP

This section covered the objective seven of the study which sought to determine how behavioural determinants influence performance of maternal health programmes in

Kenyan County Governments. Behavioural determinants were assessed by implementer's knowledge, skills & competencies, implementer's attitude & practices, workload management, staff motivation, and managerial support.

4.12.1 Implementer's Knowledge, Skills & Competencies and Performance of County CHP

The respondents were required to indicate their level of agreement with the statements implementer's knowledge in relation to performance of the CMHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.63.

Table 4.62: Implementer's Knowledge, Skills & Competencies and Performance of maternal health programmes

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
I do not understand M&E concepts properly	18 (11.0)	0 (0.0)	0 (0.0)	68 (41.7)	77 (47.2)	4.141	0.706
M&E staff have the necessary skills and competencies	16 (9.8)	20 (12.3)	17 (10.4)	33 (20.2)	77 (47.2)	3.828	0.890
Staff here lack the interpersonal and technical skills needed to work effectively	81 (49.7)	15 (9.2)	17 (10.4)	32 (19.6)	18 (11.0)	2.331	0.512
Using an M&E system is difficult.	116 (71.2)	22 (13.5)	0 (0.0)	25 (15.3)	0 (0.0)	1.595	0.581
I do not have good knowledge of using a computer.	0 (0.0)	0 (0.0)	0 (0.0)	67 (41.1)	96 (58.9)	4.589	0.994
Sub-composite mean and standard deviation						3.297	0.737

Table 4.63 reveals the results on how behavioral determinants influence performance of maternal health programmes in Kenyan County Governments. On the statement that

the staff do not understand M&E concepts properly, the mean was 4.141 and std.dev was 0.706. The item had a mean score above the cm of 3.297 implying that the MCH program is well aligned with the Kenya health strategic priorities and the sustainable development goals. Further, the std.dev was lesser than the sub-composite std.dev of 0.737 meaning that the views converged.

On the statement that M&E staff has the necessary skills and competencies, the mean was 3.828 and std.dev was 0.890. The item had a mean score above the cm of 3.297 implying that M&E staff has the necessary skills and competencies. Further, the std.dev was above the sub-composite std.dev of 0.737 implying that the views were inconsistent.

On the statement that staff here lack the interpersonal and technical skills needed to work effectively, the mean was 2.331 and std.dev was 0.512. The item had a mean score lower than the cm of 3.297 implying that staff had the interpersonal and technical skills needed to work effectively. Further, the std.dev was lesser than the sub-composite std.dev of 0.737 inferring that the opinions converged.

Further, on whether using an M&E system is difficult, the mean was 1.595 and std.dev was 0.581. The item had a mean score lower than the cm of 3.297 implying that using an M&E system was not difficult. Further, the std.dev was lesser than the sub-overall std.dev of 0.737 inferring that the views converged.

On the statement that the staff do not have good knowledge of using a computer, the mean was 4.589 and std.dev was 0.994. The item had a mean score above the cm of 3.297 implying that the staff doesn't have good knowledge of using a computer. Further, the std.dev was above the sub-composite std.dev of 0.737 inferring that the views were inconsistent.

4.12.2 Implementer's Attitude & Practices and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements implementer's attitude & practices in relation to performance of the county maternal health program using the 5 point Likert scale ranging from 5=Strongly Agree (SA), 4=Agree (A), 3 =Neutral (N), 2=Disagree (D) and 1=Strongly Disagree (SD). The findings are presented in Table 4.64.

Table 4.63: Implementer's Attitude & Practices and Performance of County MHP

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
M&E is a waste of county government resources	0 (0.0)	0 (0.0)	0 (0.0)	69 (42.3)	94 (57.7)	4.577	0.996
M&E is not very important compared to curative and preventive health interventions.	0 (0.0)	0 (0.0)	0 (0.0)	64 (39.3)	99 (60.7)	4.607	0.990
M&E does not improve organizational performance	21 (12.9)	28 (17.2)	22 (13.5)	82 (50.3)	10 (6.1)	3.196	0.686
The older employees do not understand or are not supportive of M&E practices.	18 (11.0)	0 (0.0)	0 (0.0)	62 (38.0)	83 (50.9)	4.178	0.717
M&E system is a political strategy to audit employee performance	20 (12.3)	28 (17.2)	16 (9.8)	76 (46.6)	23 (14.1)	3.331	0.762
Sub-composite mean and standard deviation						3.978	0.830

Table 4.64 presents findings on implementer's attitude & practices and performance of CMHP. On the statement that M&E is a waste of county government resources, the mean was 4.577 and std.dev was 0.996. The item had a mean score above the cm of 3.978 implying that M&E is a waste of county government resources. Further, the std.dev was above the sub-composite std.dev of 0.830 implying that the views were inconsistent.

On the statement that M&E is not very important compared to curative and preventive health interventions, the mean was 4.607 and std.dev was 0.990. The item had a mean score above the cm of 3.978 implying that M&E is not very important compared to curative and preventive health interventions. Further, the std.dev was above the sub-overall std.dev of 0.830 implying that the views were inconsistent.

On the statement that M&E does not improve organizational performance, the mean was 3.196 and std.dev was 0.686. The item had a mean score lower than the cm of 3.978 implying that M&E improves organizational performance. Further, the std.dev was lower than the sub-composite std.dev of 0.830 denoting that the views converged.

On the statement that the older employees do not understand or are not supportive of M&E practices, the mean was 4.178 and std.dev was 0.717. The item had a mean score above the cm of 3.978 implying that the older employees do not understand or are not supportive of M&E practices. Further, the std.dev was lesser than the sub-composite std.dev of 0.830 inferring that the views converged.

On the statement that M&E system is a political strategy to audit employee performance, the mean was 3.331 and std.dev was 0.762. The item had a mean score lower than the cm of 3.978 implying that M&E system is not a political strategy to audit employee performance. Further, the std.dev was lesser than the sub-composite std.dev of 0.830 inferring that the opinions converged.

4.12.3 Workload Management and Performance of County MHP

The respondents were required to indicate their level of agreement with the statements workload management in relation to performance of the county maternal health program using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.65.

Table 4.64: Workload Management and Performance of County MHP

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
There are enough qualified staff to do the required work.	34 (20.9)	26 (16.0)	31 (19.0)	70 (42.9)	2 (1.2)	2.877	0.711
Staff are overworked and have no time to concentrate on M&E activities.	0 (0.0)	0 (0.0)	0 (0.0)	64 (39.3)	99 (60.7)	4.607	0.990
Teamwork is always exercised in our maternal health department.	0 (0.0)	0 (0.0)	0 (0.0)	73 (44.8)	90 (55.2)	4.552	0.999
Excessively high workloads cause mental and physical stress, leading to poor performance and diminished productivity among staff.	18 (11.0)	0 (0.0)	0 (0.0)	59 (36.2)	86 (52.8)	4.196	0.722
Complaints are handled constructively in our department.	0 (0.0)	0 (0.0)	0 (0.0)	70 (42.9)	93 (57.1)	4.571	0.897
Sub-composite mean and standard deviation						4.161	0.864

According to findings in Table 4.65, on the statement that there are enough qualified staff to do the required work, the mean was 2.877 and std.dev was 0.711. The item had a mean score lower than the cm of 4.161 implying that there is not enough qualified staff to do the required work. Further, the std.dev was lesser than the sub-composite std.dev of 0.864 suggesting that the views converged.

Regarding the statement that staff are overworked and have no time to concentrate on M&E activities, the mean was 4.607 and std.dev was 0.990. The item had a mean score above the cm of 4.161 implying that staff are overworked and have no time to concentrate on M&E activities. Further, the std.dev was more than the sub-composite std.dev of 0.864 inferring that the views were inconsistent.

On the statement that teamwork is always exercised in our maternal health department, the mean was 4.552 and std.dev was 0.999. The item had a mean score above the cm of 4.161 implying that teamwork is always exercised in the maternal health department. Further, the std.dev was above the sub-overall std.dev of 0.864 inferring that the views were varying.

Regarding the statement that excessively high workloads cause mental and physical stress, leading to poor performance and diminished productivity among staff, the mean was 4.196 and std.dev was 0.722. The item had a mean score above the cm of 4.161 implying that excessively high workloads cause mental and physical stress, leading to poor performance and diminished productivity among staff. Further, the std.dev was lesser than the sub-composite std.dev of 0.864 suggesting that the views converged.

On the statement that complaints are handled constructively in the department, the mean was 4.571 and std.dev was 0.897. The item had a mean score above the cm of 4.161 implying that complaints are handled constructively in the department. Further, the std.dev was above the sub-composite std.dev of 0.864 inferring that the views were varying.

4.12.4 Staff Motivation and Performance of County MHP

The participants were required to indicate their level of agreement with the statements staff motivation in relation to performance of the county maternal health program

using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.66.

Table 4.65: Staff Motivation and Performance of maternal health programmes

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
Staff are always punctual arriving at work on time and leaving on time	23 (14.1)	23 (14.1)	26 (16.0)	52 (31.9)	39 (23.9)	3.374	0.861
Staff are not rewarded or recognized for good work performed	9 (5.5)	17 (10.4)	12 (7.4)	61 (37.4)	64 (39.3)	3.945	0.677
Promotions and remuneration are based on performance and merit	8 (4.9)	5 (3.1)	8 (4.9)	61 (37.4)	81 (49.7)	4.239	0.529
Staff are committed to improving the health status of our patients.	18 (11.0)	14 (8.6)	16 (9.8)	65 (39.9)	50 (30.7)	3.706	0.791
I'm highly likely to recommend someone to this organization	8 (4.9)	6 (3.7)	4 (2.5)	38 (23.3)	107 (65.6)	4.411	0.553
Sub-composite mean and standard deviation						3.935	0.682

From the findings in Table 4.66 regarding staff motivation and performance of CMHP, on the statement that staff are always punctual arriving at work on time and leaving on time, the mean was 3.374 and std.dev was 0.861. The item had a mean score lower than the cm of 3.935 implying that staff is not always punctual arriving at work on time and leaving on time. Further, the std.dev was above the sub-composite std.dev of 0.682 implying that the views were inconsistent.

On the statement that staff are not rewarded or recognized for good work performed, the mean was 3.945 and std.dev was 0.677. The item had a mean score above the cm of 3.935 implying that the staff are not rewarded or recognized for good work performed. Further, the std.dev was lesser than the sub-composite std.dev of 0.682 denoting that the views converged.

On the statement that promotions and remuneration are based on performance and merit, the mean was 4.239 and std.dev was 0.529. The item had a mean score above the cm of 3.935 implying that promotions and remuneration are based on performance and merit. Further, the std.dev was lesser than the sub-composite std.dev of 0.682 suggesting that the views converged.

On the statement that staff are committed to improving the health status of the patients, the mean was 3.706 and std.dev was 0.791. The item had a mean score lower than the cm of 3.935 implying that staff is not committed to improving the health status of the patients. Further, the std.dev was above the sub-overall std.dev of 0.682 denoting that the views were varied.

On the statement that the staff is highly likely to recommend someone to this organization, the mean was 4.411 and std.dev was 0.553. The item had a mean score above the cm of 3.935 implying that the staff is highly likely to recommend someone to this organization. Further, the std.dev was lesser than the sub-composite std.dev of 0.682 denoting that the views converged.

4.12.5 Managerial Support and Performance of County MHP

The participants were required to indicate their level of agreement with the statements managerial support in relation to performance of the CMHP using the Likert scale from 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. The findings are presented in Table 4.67.

Table 4.66: Managerial Support and Performance of County MHP

	SD	D	N	A	SA	Mean	Std. Dev.
	F	F	F	F	F		
	(%)	(%)	(%)	(%)	(%)		
Changes suggested by employees are not usually implemented.	28 (17.2)	20 (12.3)	27 (16.6)	34 (20.9)	54 (33.1)	3.405	0.981
My supervisor is not open to constructive criticism.	26 (16.0)	19 (11.7)	19 (11.7)	51 (31.3)	48 (29.4)	3.466	0.928
There is sufficient support from top management in our department.	23 (14.1)	15 (9.2)	14 (8.6)	59 (36.2)	52 (31.9)	3.626	0.884
Management sought input from employees on major decisions.	9 (5.5)	13 (8.0)	10 (6.1)	27 (16.6)	104 (63.8)	4.252	0.709
Adapting to change is easy in our county maternal health program.	9 (5.5)	10 (6.1)	9 (5.5)	62 (38.0)	73 (44.8)	4.104	0.615
Sub-composite mean and standard deviation						3.771	0.823

Table 4.67 shows findings on managerial support and performance of CMHP. Regarding the item, changes suggested by employees are not usually implemented, the mean was 3.405 and std.dev was 0.981. The item had a mean score lower than the cm of 3.771 implying that the changes suggested by employees are usually implemented.

Further, the std.dev was above the sub-composite std.dev of 0.823 inferring that the views were varied.

On the statement that the supervisor is not open to constructive criticism, the mean was 3.466 and std.dev was 0.928. The item had a mean score lower than the cm 3.771 implying that the supervisor is open to constructive criticism. Further, the std.dev was more than the sub-composite std.dev of 0.823 inferring that the views were inconsistent.

On the statement that there is sufficient support from top management in the department, the mean was 3.626 and std.dev was 0.884. The item had a mean score lower than the cm of 3.771 implying that there is insufficient support from top management in the department. Further, the std.dev was above the sub-overall std.dev of 0.823 inferring that the views were inconsistent.

On the statement that management sought input from employees on major decisions, the mean was 4.252 and std.dev was 0.709. The item had a mean score above the cm of 3.771 implying that the management sought input from employees on major decisions. Further, the std.dev was lesser than the sub-composite std.dev of 0.823 suggesting that the views converged.

On the statement that adapting to change is easy in the county maternal health program, the mean was 4.104 and std.dev was 0.615. The item had a mean score above the cm of 3.771 implying that adapting to change is easy in the county maternal health program. Further, the std.dev was lesser than the sub-overall std.dev of 0.823 denoting that the opinions converged.

4.12.6 Overall Descriptive Analysis of Behavioral Determinants

The overall behavioral determinants were measured in terms of implementer's knowledge, skills & competencies, implementer's attitude & practices, workload management, staff motivation, and managerial support. The cm and std.dev of these factors are shown in Table 4.68.

Table 4.67: Means and Standard Deviations of Behavioral Determinants

Variable Dimension/Indicator	Sub-composite	Sub-composite
	Mean (M)	Std. Dev.
Implementer's knowledge, skills & competencies	3.297	0.737
Implementer's attitude & practices	3.978	0.830
Workload management	4.161	0.864
Staff motivation	3.935	0.682
Managerial support	3.771	0.823
Composite mean and standard deviation	3.828	0.787

Results in Table 4.68 indicate that the overall mean of behavioral determinants was 3.828. The most leading factor was workload management (M=4.161) whereby the study outcomes revealed that teamwork was always exercised in the maternal health department, and complaints were handled constructively in the department. However, excessively high workloads cause mental and physical stress, resulting to deprived performance and diminished productivity among staff, staff is overworked and has no time to concentrate on M&E activities, and there is not enough qualified staff to do the required work. Views on this dimension diverged given the sub composite std.dev of 0.864 was above the overall std.dev of 0.787.

Implementer's attitude & practices (M=3.978) was also found to influence performance of the CMHP. This was shown by their thought that M&E improves organizational performance, and M&E system is not a political strategy to audit employee performance. However, some of the respondents seemed to think that the older employees do not understand or are not supportive of M&E practices, M&E is not very important compared to curative and preventive health interventions, and that M&E is a waste of county government resources. Views seemed to diverge given the sub composite std.dev of 0.830 was above the overall std.dev of 0.787.

The dimension, staff motivation (M=3.935) was achieved. It was evident as promotions and remuneration were based on performance and merit, and the staff being highly likely to recommend someone to this organization. However, staff was not committed to improving the health status of the patients, was not always punctual arriving at work on time and leaving on time, and was not rewarded or recognized for

good work performed. Views on this dimension converged given because the sub overall std.dev of 0.682 was below the composite std.dev of 0.787.

Managerial support (M=3.771) was not achieved. This could be seen since there was insufficient support from top management in the department. However, adapting to change was easy in the county maternal health program, the management sought input from employees on major decisions, the supervisor was open to constructive criticism, and the changes suggested by employees were usually implemented. Views on this dimension diverged given because the sub overall std.dev of 0.823 was above than the overall std.dev of 0.787.

The dimension, implementer's knowledge, skills & competencies (M=3.297) was not achieved. It was evident since the staff did not have good knowledge of using a computer. However, using an M&E system was not difficult, the staff had the interpersonal and technical skills needed to work effectively, the M&E staff had the necessary skills and competencies, and the MCH program was well aligned with the Kenya health strategic priorities and the sustainable development goals. Views on this dimension converged given because the sub overall std.dev of 0.737 was less than the overall std.dev of 0.787.

4.12.7 Correlation between Behavioral Determinants and Performance of County MHP

The purpose of the analysis was to determine the direction and size of the relationship between the investigated independent and dependent variables. This was in line with goal number seven of the study which sought to determine how behavioral determinants influence performance of maternal health programmes in Kenyan County Governments. The results are presented in Table 4.69

Table 4.68: Correlation between Data management for M&E and Performance of maternal health programmes

		Behavioral Determinants
Performance of maternal health programmes	Pearson Correlation	0.821
	Sig. (2-tailed)	.001

Table 4.68 shows a strong correlation amid the performance of CMHP and behavioral determinants had $r=0.821$ and $p=0.001$ which was significant since p was below 0.05.

There was therefore a strong correlation amid the performance of CMHP and behavioral determinants.

4.12.8 Regression Analysis of Influence of Behavioral Determinants on Performance of County MHP

The seventh hypothesis was also tested by obtaining data from the participants on behavioral determinants and then calculating and by means of composite index for each of the behavioral determinants indicators in the analysis. The following hypothesis, which aligned with goal number seven, was developed and evaluated.

4.12.8.1 Hypothesis Testing

To meet the seventh aim, the following hypothesis was evaluated using a simple regression model.

H_a: Behavioral determinants significantly influence performance of maternal health programmes in Kenyan County Governments.

H₀: Behavioral determinants do not significantly influence performance of maternal health programmes in Kenyan County Governments.

Regression Model

The null hypothesis was tested using the following mathematical model:

Performance of CMHP = f (behavioral determinants)

$$Y = f(X_7, \varepsilon)$$

$$Y = \beta_0 + \beta_7 X_7 + \varepsilon$$

Where: Y = Performance of County Maternal Health Programmes

X₇ = behavioral determinants

β₀ = Constant term

β₇ = Beta coefficients

ε = Error term

Data was analyzed and the regression outcomes for the influence of behavioral determinants on performance of maternal health programmes in Kenyan County Governments are presented in Table 4.70.

Table 4.69: Participation in Behavioral Determinants and Performance of maternal health programmes

Model Summary						
Model	R	R Square	Adjusted R Square		Std. Error of the Estimate	
1	0.843	0.710	0.708		1.349	
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	716.922	1	716.922	393.905	4.08E-45
1	Residual	293.026	161	1.820		
Total		1009.948	162			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.723	0.228		3.171	0.002
	Behavioral Determinants	0.895	0.354	0.843	2.528	0.012
Predictors: (constant), Behavioral Determinants						
Dependent Variable: Performance of CMHP						

Table 4.70 displays that $r=0.843$. This shows that behavioral determinants have a strong link with performance of maternal health programmes in Kenyan County Governments. $R^2 = 0.710$ demonstrating that behavioral determinants explains 73% of the alterations in the performance of maternal health programmes in Kenyan County Governments.

The overall F statistics, ($F = 393.905$, $p < 4.08E-45 < 0.05$), indicated that there was a statistically significant relationship between behavioral determinants and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was thus rejected and it was resolved that behavioral determinants significantly influences performance of maternal health programmes in Kenyan County Governments.

4.12.9 Findings from Qualitative Information

From the interviews, the County governors were required to indicate how the organizational structure plays part in the execution of M&E system in the county. They indicated through adequate supply of materials, ensuring all structures are well put up, providing funds, providing syllabus, by proper communication on roles need

from every stakeholder, and supporting M&E activities where data –based decision making happens.

The County Executive Members for Health also indicated how organizational culture play part in the execution of M&E system in this county. They stated that by making sure all supplies are available whenever in need, by making sure that there are no shortages in supplies, by making sure there is enough resource and supplies whenever needed, proper organizational systems ensures better M&E processes, and ensuring smooth run up of activities.

The County Chief Officers for Health were also required to indicate the communications structure and how it plays part in the execution of M&E in the county. They indicated by making sure that all stakeholders work together as one, through channel communication or through hierarchy, outreach programs in M& E, and ensuring that there is a staff in charge of the program.

The County delivery unit members were asked how human resources availability or lack of play part in the execution of M&E in the county. They indicated that it leads to low implementation, and some have old staff that is hard to train. Moreover, they indicated that there is political goodwill. They further indicated that maternal data is critical and should be taken with seriousness and reported on time, ensuring all gaps and indicators are met and gaps filed hence doing so, good and quality goals and objectives achieved, early reporting of maternal health data for good decision making, getting enough qualified staff, developing systems in each hospital, conducting frequent trainings, and seeking for goodwill from politicians, strengthen M&E activities. They added that to improve performance of MHPin this county, the resource supply should be increased, and there should also be improved training and supplies. One County delivery unit member stated:

“When HR professionals help cultivate better teamwork within the organization, healthcare providers can better coordinate patient services and improve the positive impact on the population, according to a seminal study published in Human Resources For Health.”

4.13 Moderating Influence of Contextual Determinants on Relationship between Monitoring and evaluation and Performance of County MHP

The eighth hypothesis was also tested by obtaining information from the participants on contextual determinants and then calculating and utilizing composite index for each of the contextual determinants indicators in the analysis. The following hypothesis was developed and tested in accordance with objective eight.

H_a: Contextual determinants significantly moderate the relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya.

H₀: Contextual determinants don't significantly moderate the relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya.

The goal is to see how independent variables change when a moderating variable is added to the equation. The model was described as follows:

$$Y = \beta_0 + \beta_1 X_1 * (X_5) + \beta_2 X_2 * (X_5) + \beta_3 X_3 * (X_5) + \beta_4 X_4 * (X_5) + e$$

Where: Y = Performance of County Maternal Health Programmes in Kenya

a = Constant

β = Coefficient

X₁ = Planning for M&E

X₂ = Stakeholders engagement in M&E

X₃ = Capacity building for M&E

X₄ = Data management for M&E

X₅ = Contextual determinants

e = error term

The moderating role of contextual variables on the connection between monitoring and evaluation procedures and performance of maternal health programmes in Kenyan County Governments was investigated using a stepwise regression technique using three models.

Step one: Influence of Monitoring and evaluation on Performance of maternal health programmes in Kenyan County Governments

In step one, the independent variable M&E practices was regressed on performance of maternal health programmes in Kenyan County Governments. The results are presented in Table 4.71.

Table 4.70: Combined Monitoring and evaluation and Performance of maternal health programmes in Kenyan County Governments

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	0.849	0.721	0.714	1.490		
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	921.983	4	230.496	101.895	1.02E-42
	Residual	357.41	158	2.262		
	Total	1279.393	162			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.267	0.182		6.962	.001
	Planning for M&E	0.889	0.143	0.859	6.217	.014
	Stakeholder engagement for M&E	0.895	0.245	0.838	3.653	.013
	Capacity building for M&E	0.802	0.212	0.796	3.783	.007
	Data Management for M&E	0.911	0.265	0.855	3.438	.016
Predictors: (constant), Planning for M&E, Stakeholder Engagement for M&E, Capacity Building for M&E, Data Management for M&E						
Dependent Variable: Performance of County Maternal Health Programmes						

Table 4.71 shows that $r=0.849$. This means that combining M&E practices have a strong link with performance of maternal health programmes in Kenyan County Governments. $R^2 = 0.721$ indicating that combined monitoring and evaluation explain 72.1% of the variations in the performance of CMH- in Kenya. The results on test of significance also indicate that; planning for M&E ($\beta=0.859$, $p<0.014$), stakeholders engagement in M&E ($\beta=0.838$, $p<0.013$), capacity building for M&E ($\beta=0.796$, $p=0.007$), data management for M&E ($\beta=0.855$, $p=0.016$) were all-significant at $p<0.05$ and 95% confidence level. This outcome suggests that combined monitoring

and evaluation explain 72.1% of the variations in the performance of maternal health programmes in Kenyan County Governments.

Step two: Influence of Contextual Determinants on Performance of County MHP

The mathematical model used for testing the null hypothesis was as follows:

Performance of maternal health programmes = f (Contextual determinants)

$$Y = f(X_6, \varepsilon)$$

$$Y = \beta_0 + \beta_6 X_6 + \varepsilon$$

Where: Y = Performance of County Maternal Health Programmes

X6 = Contextual determinants

β_0 = Constant term

β_6 = Beta coefficients

ε = Error term

Data was analyzed and the regression outcomes for the influence of contextual determinants on performance of maternal health programmes in Kenyan County Governments are demonstrated in Table 4.71.

Table 4. 71: Contextual Determinants and Performance of CMHP

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	0.877	0.768	0.767	1.264		
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	853.353	1	853.353	533.739	5.46E-53
	Residual	257.41	161	1.599		
	Total	1110.763	162			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.813	0.227		3.581	0.000
	Contextual determinants	0.901	0.293	0.877	3.075	0.002

Predictors: (constant), Contextual determinants
Dependent Variable: Performance of County Maternal Health Programm

Table 4.71 denotes that $r=0.877$. This implies that contextual determinants have a strong link with performance of maternal health programmes in Kenyan County Governments. $R^2 = 0.768$ demonstrating that contextual determinants explains 76.8% of the disparities in the performance of maternal health programmes in Kenyan County Governments.

The overall F statistics, ($F = 533.739$, $p < 5.46E-53 < 0.05$), noted that there was a statistically significant relationship between contextual determinants and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was thus rejected and it was concluded that contextual determinants significantly influences performance of maternal health programmes in Kenyan County Governments.

Step three: Influence of Combined Monitoring and evaluation and Contextual Determinants on Performance of maternal health programmes in Kenyan County Governments

The moderator (contextual determinants) was incorporated into the model between M&E practices and performance of Kenyan CMHP in stage two. Table 4.72 summarizes the findings.

Table 4.72: Combined Monitoring and evaluation, Contextual Determinants and Performance of CMHP

Models Summary						
Model	R	R Square	Adjusted R Square	Std. Error	F	p-value
1	0.849	0.721	0.714	1.490	134.785	.000
2	0.929	0.862	0.858	0.949	260.874	.000
Model	Sum of Squares		Df	Mean Square	F	Sig
1	Regression	921.983	4	230.496	101.895	1.02E-42
	Residual	357.41	158	2.262		
	Total	1279.393	162			
ANOVA						
Model	Sum of Squares		Df	Mean Square	F	Sig
2	Regression	909.918	5	181.984	196.910	9.97E-66
	Residual	145.099	157	0.924		
	Total	1055.017	162			

Regression Coefficients						
			Un standardized Coefficients	Standardized Coefficients	t	Sig
			B	Std. Error	Beta	
(Constant)			1.278	0.191		6.691 0.000
Planning for M&E*CD			0.897	0.361	0.718	2.485 0.019
Stakeholders Engagement in M&E*CD			0.912	0.317	0.709	2.877 0.007
Capacity Building for M&E*CD			0.899	0.278	0.789	3.234 0.003
Data Management for M&E*CD			0.914	0.296	0.811	3.088 0.004

The outcomes in Table 4.72 indicate that after introduction of contextual determinants into the association, and the interaction terms in model 3 raised the R square by 0.141. This means that the interaction amid contextual determinants and combined M&E practices describes 14.1% alterations in performance of CMHP. F was at $F(5, 157) = 196.910, p < 9.97E-66 < 0.05$) and thus the difference in the model 1 and model 3 shows that contextual determinants moderates the relationship between M&E practices and performance of maternal health programmes in Kenyan county governments. This is justified by steps advanced by Baron and Kenny (1986).

The null hypothesis was therefore rejected, and it was resolved that contextual determinants significantly moderate the relationship between monitoring and evaluation and performance of maternal health programmes in Kenyan County Governments.

4.14 Moderating Influence of Behavioural Determinants on Relationship between Monitoring and evaluation and Performance of CMHPs

The hypothesis nine stated, “Behavioral determinants do not significantly moderate the relationship between M&E practices and performance of CMHPs in Kenya”. The goal is to see how independent variables change when a moderating variable is added to the equation. The model was described as follows:

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

Where: Y = Performance of County Maternal Health Programmes in Kenya

a = Constant

β = Coefficient

X₁ = Planning for M&E

X₂ = Stakeholders engagement in M&E

X₃ = Capacity building for M&E

X₄ = Data management for M&E

X₆ = Behavioral determinants

e = error term

The moderating role of behavioral variables on the connection between monitoring and evaluation methods and performance of maternal health programmes in Kenyan County Governments was investigated using a stepwise regression technique using three models.

Step one: Influence of Monitoring and evaluation on Performance of maternal health programmes in Kenyan County Governments

In step one, the independent variable M&E practices was regressed on performance of maternal health programmes in Kenyan County Governments. The results are presented in Table 4.73.

Table 4.73: Combined Monitoring and evaluation and Performance of maternal health programmes in Kenyan County Governments

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	0.849	0.721	0.714	1.490		
ANOVA						
Model	Sum of Squares		Df	Mean Square	F	Sig
1	Regression	921.983	4	230.496	101.895	1.02E-42
	Residual	357.41	158	2.262		
	Total	1279.393	162			

		Regression Coefficients			t	Sig.
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	1.267	0.182		6.962	.001
	Planning for M&E	0.889	0.143	0.859	6.217	.014
	Stakeholder engagement for M&E	0.895	0.245	0.838	3.653	.013
	Capacity building for M&E	0.802	0.212	0.796	3.783	.007
	Data Management for M&E	0.911	0.265	0.855	3.438	.016
Predictors: (constant), Planning for M&E, Stakeholder Engagement for M&E, Capacity Building for M&E, Data Management for M&E Dependent Variable: Performance of County Maternal Health Programmes						

Table 4.73 shows that $r=0.849$. This indicates that combined M&E practices have a strong link with performance of maternal health programmes in Kenyan County Governments. $R^2 = 0.721$ indicating that combined monitoring and evaluation explain 72.1% of the variations in the performance of maternal health programmes in Kenyan County Governments. The results on test of significance also indicate that; planning for M&E ($\beta=0.859$, $p<0.014$), stakeholders engagement in M&E ($\beta=0.838$, $p<0.013$), capacity building for M&E ($\beta=0.796$, $p=0.007$), data management for M&E ($\beta=0.855$, $p=0.016$) were all-significant at $p<0.05$ and 95% confidence level. This result means that combined monitoring and evaluation explain 72.1% of the variations in the performance of maternal health programmes in Kenyan County Governments.

Step Two: Influence of Behavioral Determinants on Performance of County MHP

The null hypothesis was tested using the following mathematical model:

Performance of CMHP = f (behavioral determinants)

$$Y = f(X_7, \varepsilon)$$

$$Y = \beta_0 + \beta_7 X_7 + \varepsilon$$

Where: Y = Performance of County Maternal Health Programmes

X_7 = behavioral determinants

β_0 = Constant term

β_7 = Beta coefficients

ε = Error term

Data was analyzed and the regression outcomes for the influence of behavioral determinants on performance of maternal health programmes in Kenyan County Governments are presented in Table 4.74.

Table 4.74: Participation in Behavioral Determinants and Performance of maternal health programmes

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	0.843	0.710	0.708	1.349		
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	716.922	1	716.922	393.905	4.08E-45
1	Residual	293.026	161	1.820		
Total		1009.948	162			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.723	0.228		3.171	0.002
1	Behavioral Determinants	0.895	0.354	0.843	2.528	0.012
Predictors: (constant), Behavioral Determinants						
Dependent Variable: Performance of CMHP						

Table 4.74 displays that $r=0.843$. This shows that behavioral determinants have a strong link with performance of maternal health programmes in Kenyan County Governments. $R^2 = 0.710$ demonstrating that behavioral determinants explains 73% of the alterations in the performance of maternal health programmes in Kenyan County Governments.

The overall F statistics, ($F = 393.905$, $p < 4.08E-45 < 0.05$), indicated that there was a statistically significant relationship between behavioral determinants and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was thus rejected and it was resolved that behavioral determinants significantly influences performance of maternal health programmes in Kenyan County Governments.

Step three: Influence of Combined Monitoring and evaluation and Behavioral Determinants on Performance of maternal health programmes in Kenyan

County Governments

In step two the influence of the moderator (behavioral determinants) was introduced into the model between M&E practices and outcomes of CMHP in Kenya. The results are presented in Table 4.75.

Table 4.75: Combined Monitoring and evaluation, Behavioral Determinants and Performance of CMHP

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error	F	p-value
1	0.880	0.775	0.769	1.264	216.342	.000
2	0.917	0.841	0.836	0.591	260.874	.000
Model	Sum of Squares		Df	Mean Square	F	Sig
1	Regression	883.217	4	220.804	135.684	4.88E-50
	Residual	257.12	158	1.627		
	Total	1140.337	162			
ANOVA						
Model	Sum of Squares		Df	Mean Square	F	Sig
	Regression	298.81	5	59.762	166.595	6.91E-61
2	Residual	56.32	157	0.359		
	Total	355.13	162			
Regression Coefficients						
		Un standardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Error	Beta		
(Constant)		1.323	0.217		6.097	0.000
Planning for M&E*BD		0.894	0.249	0.763	3.590	0.001
Stakeholders Engagement in M&E* BD		0.917	0.381	0.892	2.407	0.023
Capacity Building for M&E* BD		0.896	0.359	0.737	2.496	0.019
Data Management for M&E*BD		0.946	0.334	0.824	2.832	0.008

The outcomes in Table 4.75 indicate that after introduction of behavioral determinants into the link, and the collaboration term in model 3 rose the R square by 0.066. This denotes that the collaboration between behavioral determinants and combined M&E practices describes 6.6% variations in performance of CMHP. F was

at $F(5, 157) = 166.595, p < 6.91E-61 < 0.05$) and thus the difference in the model 1 and model 3 shows that behavioral determinants moderates the relationship between M&E practices and performance of maternal health programmes in Kenyan county governments. This is justified by steps advanced by Baron and Kenny (1986).

The null hypothesis was therefore rejected, and it was resolved that behavioral determinants significantly moderate the relationship between monitoring and evaluation and performance of maternal health programmes in Kenyan County Governments.

Table 4.76: Summary of Hypothesis Testing and Results

Hypothesis	Findings	Statistics	Conclusion
H ₀ : Planning for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments	Planning for M&E had a positive and significant influence on performance of maternal health programmes in Kenyan County Governments	$r=0.859, p=0.023 < 0.05$	Null Hypothesis rejected
H ₀ : Stakeholder engagement for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments	Stakeholder engagement for M&E had a positive and significant influence on performance of Maternal Health Programmes Kenya	$r=0.838, p=0.001 < 0.05$	Null Hypothesis rejected
H ₀ : Capacity building for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments	Capacity building for M&E had positive and significant influence on performance of County Maternal Health Programmes in Kenya	$r=0.796, p=0.028 < 0.05$	Null Hypothesis rejected

H ₀ : Data management for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments	Data management for M&E has a positive and significant influence on performance of County Maternal Health Programmes in Kenya	r=0.855, p=0.042<0.05	Null Hypothesis rejected
H ₀ : Combined monitoring and evaluation practices don't significantly influence performance of County MHP in Kenya	Combined M&E practices have a positive and significant influence on performance of County Maternal Health Programmes in Kenya	F=101.895, p<1.02E-42<0.05	Null Hypothesis rejected
H ₀ : Contextual determinants don't significantly influence performance of County MHP in Kenya	Contextual determinants had a positive and significant influence on performance of County Maternal Health Programmes in Kenya	r=0.638, p=0.000<0.05	Null Hypothesis rejected
H ₀ : Behavioral determinants do not significantly influence performance of maternal health programmes in Kenyan County Governments	Behavioral determinants had a positive and significant influence on performance of County Maternal Health Programmes in Kenya	r=0.821, p=0.001<0.05	Null Hypothesis rejected
H ₀ : Contextual determinants don't significantly moderate the relationship between monitoring and evaluation practices and performance of County MHP in Kenya	Contextual determinants had a positive and significant moderating influence on the relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya	F (5, 157) =196.910, p<9.97E-66<0.05	Null Hypothesis rejected
H ₀ : Behavioral determinants don't significantly moderate the relationship between monitoring and evaluation practices and performance of County MHP in Kenya	Behavioral determinants had a positive and significant moderating influence on the relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya	F (5, 157) =166.595, p<6.91E-61<0.05	Null Hypothesis rejected

4.15 Discussion of Findings

The findings of the study are discussed in connection to the study's aims in this section. Both descriptive and inferential significance are examined in relation to the findings. The findings of the current study are compared to those of previous studies in the discussion. It also explains the assumptions that the arguments are built on.

4.15.1 Planning for M&E and Performance of Maternal Health Programmes in Kenyan County Governments

The findings revealed that planning for M&E significantly influences performance of maternal health programmes in Kenyan County Governments. It was also found that stakeholder identification was done during project start. The study findings were in line with UNDP (2018) however asserts study that one of the many problems in the World Bank project design and preparation has been insufficient planning and coordination about data collection and use. This difficulty has hampered project implementation, management, and sustainability, as well as the incorporation of M&E.

The study found that there was an M&E unit/department/section; there is clear adequate budgetary allocation for M&E. This concurs with Gillenkirch (2015) who found that the budget ideas of the subordinate during the negotiation and his performance after the negotiation improve when budgets are used for both planning and performance evaluation. When the superior is restricted to a single budget rather than distinct budgets for planning and performance evaluation, these impacts are amplified, especially when it comes to subordinate performance. The benefits of improved subordinate collaboration more than compensated for the loss of flexibility caused by the superior's confinement to a single budget in the experimental context.

The study also found that the annual work plans to guide the activities were prepared. Moreover, the study established that participatory planning was used when preparing the work plans. The findings were in line with Spinner (2018) who noted that firms that do not devote adequate time and effort to project planning and management fail. As part of project coordination, project planning ought to specify when and how frequently data will be obtained, as well as who will be responsible for assembling and distributing reports to the firms, beneficiaries, or donors. This confirms the study findings that roles and responsibilities of maternal health program staff and stakeholders were clearly defined. Taut (2017) stated that a well-designed M&E planning and coordination system gives information on a project's progress and shows

if it is accomplishing its goals. This information may reveal where improvements to the project are needed in light of changing circumstances in the local environment

The research found that potential risks and unexpected circumstances that might arise during program implementation were not identified. These findings differed from that of Mugo and Oleche (2015) who argued that of all factors, budgetary allocation played a vital duty in project success. Moreover, the study found that an M&E policy/framework does not exist that guides M&E activities. Mboera, Rumisha, Mlacha, Mayala, Bwana and Shayo (2017) differed that data analysis challenges included a lack of compilation books, a lack of computers, poor data storage, incomplete recording, a lack of adequate data analysis skills, and an increase in workloads. This implies the availability of an M&E policy/framework to guide M&E activities.

4.15.2 Stakeholders Engagement in M&E and Performance of CMHP

The study found that there were people who strongly advocate for and support M&E within the county and there's no maternal health M&E Technical Working Group (TWG %) /committee at the county. The findings were not supported by Hillman (2018) as he noted that officials needed to be trained in data collection, monitoring methods and analysis. The study also found that the maternal health TWG/ committee at the county did not meet regularly. The findings differ with those of Otieno and Atieno (2018) who argued that those working at the Ministry of Health, as well as those in County Maternal Health groups, may need to attend workshops, seminars, or conferences on a regular basis to refresh their skills in areas such as planning, coordination, surveillance, data use, ICT, and methodology.

The findings reveal that stakeholders' engagement in M&E significantly influences performance of CMHP. These finding was further backed up by Wayne (2015) who noted that when developing monitoring and evaluation methods, it is critical to include stakeholder input. A multi-sectoral approach, which includes delegating some work to stakeholders, improves learning, develops ownership, and promotes transparency among the participants. As indicated by PASSIA (2018), the reasoning regarding checking and assessment at the structure arrange encourages the undertaking partners to think as far as execution estimation even before usage begins with an unmistakable picture of desires for what an effective venture would resemble. As a rule, more

gatherings is disillusioned, as not all desires may progress toward becoming reality and partners may make over the top desires.

The study discovered that the synergy and close working relationship between the county M&E unit and or the county health M&E unit was strong and need not be improved. This is in line with World Bank (2014) who found that accomplices should be related with perceiving the endeavour, the goals and targets and recognizing evidence of markers that will be used in watching and evaluation. The accomplices are also drawn in with get-together and examination of the data and getting the activities. As per Kakabadse *et al.* (2015), checking and evaluation structures have been in nearness since the old events, in any case today, the necessities for M&E systems as an organization device to show execution has created with enthusiasm by accomplices for obligation and straightforwardness through the use of the watching and appraisal by NGOs and diverse establishments, including the organization. Improvement banks and individual guide associations moreover reliably apply M&E to measure progression amplexity similarly as estimation for straightforwardness

The study established that a stakeholder engagement and communication plan showing the roles of each stakeholder exists. This concurs with Bhattacharyya and Cummings (2015) who stated that in meeting and participation with all involved people, they make sense of what is to be checked and surveyed, how watching and appraisal is to happen including recognizing evidence of markers, they do the examination of the data and assess the execution of the endeavor and have the ability to make course on the most capable technique to proceed with the endeavor. Stakeholders play an important role and interact on a variety of levels—from local to global—and their involvement and collaboration have an impact on the efficacy of a development intervention. Stakeholder participation is critical when creating monitoring and evaluation systems, according to Wayne (2015). Kala (2020) found that privacy issues e.g. invasion by hackers; security concerns; ICT literacy; information sharing among stakeholders and system incompatibility with stakeholders/partners influence performance of county government projects in Mandera central sub-county to a great extent.

4.15.3 Capacity Building for M&E and Performance of Maternal Health Programmes in Kenyan County Governments

The study found that human resources for maintaining and updating the county maternal health databases were not adequate. The study also found that the human capacity for M&E is usually enhanced through on job training, mentorship & coaching. These findings are in line with World Health Organization (2015) who argues that capacity building can help close the gap between data demand and utilization and planning. Project sustainability will almost certainly be harmed if officials and, indeed, farmers are lacking in capacity. Many countries have had success with capacity building in M&E. In comparison to the rest of the world, the performance of health programs in Sub-Saharan Africa is still poor. Sub-Saharan Africa continues to lag behind the rest of the globe in terms of the number of programs.

The study found that the staff involved in M&E has skills and competencies needed to fulfill the county maternal health programs M&E mandate. Moreover, the study found that there's a county database of trainers and other technical service providers capable of building M&E capacity. The study concurs with Simister and Smith (2015) who indicated that capacity, if of an person or firm, is constantly changing, necessitating vigilance in order to meet the changing needs. Furthermore, capacity is divided into three levels: individual, firm, and environmental, all of which require the supply and use of M&E data, and research and long-term sustainability. This is also in line with the finding of the study that the IT capacity for the department is enough and effective.

The study found that the staff is not familiar with the county integrated monitoring & evaluation guidelines. Also, the study found that a maternal health research and evaluation agenda does not exist that directs research and evaluation activities. Odhiambo (2015) affirms that in Kenya, evaluations primarily look at inputs and outputs, ignoring the impact of NGOs working with donors and officials who lack M&E abilities.

The affirmation by Odhiambo (2015) confirms the study findings that the health facility surveys at maternal health related service delivery points are not conducted regularly. Moreover, the study found that IT equipment and supplies are not available for maintaining the county maternal health databases. Karanja (2016) agrees with these findings that youth project sustainability is influenced by training, leadership, and good monitoring and evaluation. Poor skills in results-based M&E community-based

programs also have an impact on monitoring and evaluation. This study discovered that a lack of training for people in charge of monitoring and evaluation activities, as well as an unclear institutional framework for doing so, had an impact on their effectiveness.

Further, the study found that resources – human, financial, material – were committed to implement the M&E work plan. The study also found that M&E personnel do not have opportunities for lateral and vertical career moves within the county. Stirman et al. (2017) argues in line with the findings that the capacity and characteristics relating to the new program or practice themselves are elements that determine sustainability. In most developing nations, M&E is characterized by poor coordination within the government programs, as well as a lack of human capacity, notably in terms of assessment skills and expertise. As a result, greater training in evaluation techniques and processes is required. In most situations, donor countries develop evaluation standards, while developing countries must build their own evaluation standards. Mokuia and Kimutai (2019) found out that most of the staff in the PPP do not have formal training in project management and M&E. Since they had stayed for long in their positions at work, they tended to be competent.

4.15.4 Data Management for M&E and Performance of Maternal Health Programmes in Kenyan County Governments

The study found that there are no adequate skills in data analysis in the department. This is in line with Ibrahim (2017) that there is too much data and not enough information in such countries. However, he points out that the issue in African nations, and possibly other regions, is that, while sector ministries gather a variety of performance data, the data quality is generally poor. Some developing nations acquire a lot of data that can't be used, according to Kuzek and Rist (2014).

The study found that there are no adequate equipment & software for data, analysis, and presentation and data storage. Also, the study found that there is no functional database for capturing and storing maternal health services data. Baseline assessments were also found to be conducted before any maternal health projects are implemented. These results concur with Kusek and Rist (2014) who stated that the baseline is the first crucial measurement of the performance metrics, and it serves as at the start, or guide, for monitoring project or program performance in the future. As a result,

baseline data should be gathered for each identified outcome indicator at the very least. Setting target values is crucial since the success of a project will be judged in part by comparing target values to attained or real values.

Data is stored in multiple methods and places to ensure there is always a copy available in case one type or location is lost or destroyed; Odhiambo (2015) says that the evaluations have yet to reach a satisfactory level. They only deal with particular components of the result chain, such as inputs and outputs, at the expense of effect, are driven by activist and donor stresses, and are done out by evaluators who lack the necessary knowledge. There is a need to focus on the following in terms of demand and use: data documentation (both old and new); data use; data requirement; data quality and relevance.

These findings are in line with Segone (2018) according to the World Bank Independent Group, the majority of project stakeholders do not recognize the value of M&E findings. This demonstrates that there is a gap in terms of present and obligatory information for project sustainability.

The study found that the maternal health targets and indicators under UN sustainable development goals (SDGs) are not monitored and tracked regularly. The study also found that the staff doesn't share data and information with the national maternal health program. Moreover, it was found that the information products e.g. newsletters, reports etc. are not regularly sent to a wide variety of stakeholders. Patton (2015) agrees that there is no purpose in collecting and analyzing expensive monitoring and assessment data. Demand and use M&E is an important practice that must be focused on certain target groups.

The research established that there are procedures for data sharing with the national M&E system and international donors and agencies. The findings are related to Woodhill (2015) who stated that the application of M&E findings improves the effectiveness of action and, as a result, its long-term viability. In M&E practice, relevant methodologies must be chosen, whether quantitative or qualitative, and the goal for which the data will be used must also be considered. Monitoring data and evaluation findings must be produced by the monitoring and evaluation system. This is especially important to key stakeholders, and it may be used to enhance government

performance, respond to sufficient demand for M&E work, and ensure its funding and long-term viability.

The study also found that there are no guidelines to support the analysis, presentation and use of data at the facility (e.g. graphs on walls showing cumulative coverage). The findings contradict Riddell et al. (2017) who concluded that the data quality is exceptionally low, according to a recurrent and consistent result obtained across countries and in regard to all clusters of investigations. This research found that several committees involved in data collecting and analysis for monitoring and evaluation need to be trained.

The study found that evidence from the various MCH programs in the county is used to influence policy. Further the study found that the staff uses health information system data to make decisions. The results are agreement with Segone (2018) who stated that in order to ensure that monitoring and evaluation findings serve to ease the problem of relevance; there is a need to pay more attention to timeliness when releasing them. To address the inherent problems, indicators should be dispersed in accordance with what they are supposed to measure: inputs, activities, outputs, outcomes, or effect.

The research established that M&E findings are not reported to donors, stakeholders and internal staff members to ensure project improvement, transparency and data-driven decision making. The findings agree with Mackay (2017) who notes that data from monitoring and evaluation offers a foundation for feeding back into projects, improving policy analysis and policy formation, and assisting in project and managerial tasks. A core practice of monitoring and evaluation is the demand for and utilization of data.

4.15.5 Combined Monitoring and Evaluation and Performance of Maternal Health Programmes in Kenyan County Governments

From the findings, combined M&E practices had a positive influence on performance of maternal health programmes in Kenyan County Governments. This was in line with Scheirer (2017) who stated that M&E methods guarantee that project outcomes can be measured at the impact, outcome, output, process, and input levels, providing a framework for accountability and assisting in making informed program decisions. As

Ober (2017) points out, monitoring and evaluation as part of design programs ensure logical reporting, quantify efficiency and effectiveness, ensure effective resource distribution, stimulate continuous learning, and improve decision-making.

The study found that combined M&E practices significantly influences performance of maternal health programmes in Kenyan County Governments. This was supported by Velayuthan (2015) who observes that an M&E plan that is adequately documented encourages project stakeholders what to do in terms of M&E activities before implementation of a project begins. Therefore, details of how monitoring and evaluation will work within a project should be written up at the earliest possible time. There is need to provide greater detail which should be captured in an M&E plan. For M&E practice to enhance tracking project accountability there is need to feed project information into it so as to help in tracking of project progress. This view supports that from Santosh (2017) that avers that Monitoring information should be fed into the project monitoring and evaluation process to build up data bank that can be used to improve the selection and design of future projects besides improving the project, in line with this observation the study sought to investigate in M&E information was fed into the M&E process to track project transaction and enhancing improvements.

4.15.6 Contextual Determinants and Performance of Maternal Health Programmes in Kenyan County Governments

The study found that employees and beneficiaries easily access section heads and that the supervisors are empowered to make decisions at their level. This in in line with Kandie (2016) who states that a strong culture shows cooperation and a people situated empowering trust workplace. In spite of the fact that various typologies, orders and instruments for estimating authoritative culture exist, there is little concurrence on which ones are increasingly fitting or better than the other.

The study found that there's no clarity on who is to carry out M&E (confusion on oversight and M&E and who should do what). Moreover, the study revealed that the M&E is an audit tool to audit mismanagement and poor performance. The findings were supported by the study of Gwaya (2014) who confirms that human factors have a direct correlation on the performance of projects. More studies established the importance of human factors increased concurrently as projects became more

complex coupled with this, project manager's management ability have been reported to have a direct correlation with project outcome. Though project management in some cases is singled out as an individual contributor to poor performance of projects, it is seen to transcend all other project and organizational factors.

The study found that communication channels are not very open here among management and workers. The study also found that everyone here was not clear on what drives the success as a department. These findings contradict with Davis and Daniels (2015) who argued that companies can decrease the high levels of complexity associated with information management by implementing a complete big data architecture to manage both structured and unstructured data. Finally, an IT stack that has been designed and developed to work together can save time on routine maintenance, integration, and testing. Simplifying the IT infrastructure can free up time, money, and resources for more strategic, growth-oriented tasks.

4.15.7 Behavioral Determinants and Performance of Maternal Health Programmes in Kenyan County Governments

The study found that staff is not always punctual arriving at work on time and leaving on time. The findings correlate with Whitley and Kite (2015) who demonstrated that a worker with low confidence and negative work demeanor is probably going to be more engaged with indiscipline cases than one with a positive mental work disposition. Every single other factor being equivalent people with constructive work demeanors perform superior to those with adverse dispositions.

The research established that the staff are not rewarded or recognized for good work performed. This finding is in disagreement with Ludwig, Walton and Beer (2014) who states that inborn prizes gather from playing out the assignment itself, and may incorporate the fulfillment of achievement or a feeling of impact. Models incorporate pay, advantages and working conditions. Outward rewards originate from the association as cash, perquisites or advancements from managers and collaborators as acknowledgment.

The study found that excessively high workloads cause mental and physical stress, resulting to poor performance and diminished productivity among staff. The finding is supported by Proudlock (2016) who noted that the entire procedure of effect

assessment and especially the examination and elucidation of outcomes can be incredibly enhanced by the interest of planned recipients, who are after all the essential partners in their very own advancement and the best judges of their own circumstance. There are the individuals identity welcomed and the individuals who won't be welcomed in the ID of undertakings in CDF. The activities recognized by those near the MP are said to be passed as having been distinguished by the network (Schaaf, Topp & Ngulube, 2017).

The study found that the MCH program is well aligned with the Kenya health strategic priorities and the sustainable development goals; it was undecided whether M&E staff has the necessary skills and competencies; staff had the interpersonal and technical skills needed to work effectively; using an M&E system was not difficult; the staff has good knowledge of using a computer; M&E is a waste of county government resources; M&E is not very important compared to curative and preventive health interventions.

The study found that teamwork is always exercised in our maternal health department. Crawford and Bryce (2016) assert that straightforwardness and responsibility of the assets to the partners including benefactors, venture recipients and the more extensive network in which the undertaking is executed. It is generally concurred that there are two kinds of inspiration, to be specific outward and natural. Inborn inspiration is that conduct which an individual deliver due to the charming encounters related with the conduct itself (Mosley, Pietri & Mosley Jnr, 2014). They come from inspiration that is normal for the activity itself. Precedents are accepting positive acknowledgment, gratefulness, a feeling of accomplishment and addressing the difficulty.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter contains an overview of the findings, debates, conclusions, and recommendations. The outcomes for each of the study's hypotheses are listed in the summary of findings, along with whether they were rejected or not. The findings are compared to those from earlier studies in the literature in the discussion section. The research objectives led the results offered in this section, which were informed by the current study's findings, analysis, interpretation, and debates. Based on the study's findings, contributions to the body of knowledge were created. Finally, recommendations for policy, practice, methodology, and future study were given.

5.2 Summary of Findings

The study purpose was to establish moderating influence of contextual and behavioural determinants on the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments. This section shows the summary of the findings of the study variables.

5.2.1 Planning for M&E and Performance of Maternal Health Programmes in Kenyan County Governments

The first objective of this study was to establish how planning for M&E influences performance of maternal health programmes in Kenyan County Governments. Budgeting, resource mobilization & allocation had a sub-composite mean of 3.994 implying that the respondents agreed that budgeting, resource mobilization & allocation influences performance of maternal health programmes in Kenyan County Governments. This is attributed to the presence of an M&E unit/department/section, clear adequate budgetary allocation for M&E, adequate M&E infrastructure for M&E programming, and organized resource mobilization activities for supporting M&E planning. M&E frameworks had a sub-composite mean of 3.992 suggesting that the respondents agreed that M&E frameworks influences performance of maternal health programmes in Kenyan County Governments. This was mainly because of the existence of a logical framework to monitor the maternal health programs implementation.

Also, the study found that the respondents agreed that strategic planning in support of M&E with a sub-composite mean of 3.964 influences performance of maternal health programmes in Kenyan County Governments. This was clear because there were short-term and long-term county maternal health targets, the programs had a clear sustainability plan for the maternal health interventions, and the MCH program was well aligned with the Kenya health strategic priorities and the sustainable development goals. M&E work plans were also found to influence performance of maternal health programmes in Kenyan County Governments (M=3.779). This was because participatory planning was used when preparing the work plans, annual work plans to guide the activities are prepared, and the staff had a detailed design of the maternal health program implementation plan. M&E policy had a sub-composite mean of 3.734 and therefore influences performance of maternal health programmes in Kenyan County Governments. This was clear as the staff was confident with the county planning for M&E activities, M&E components and strategies are included in the county maternal health policy, and roles and responsibilities of maternal health program staff and stakeholders are clearly defined.

The null hypothesis stated that planning for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments. The study found a strong correlation between the performance of CMHP and planning for M&E ($r=0.859$, $p=0.023<0.05$). Moreover, $R^2 = 0.737$ indicating that planning for M&E explains 73.7% of the variations in the performance of maternal health programmes in Kenyan County Governments. The overall F statistics, ($F = 451.764$, $p<1.37E-48<0.05$), indicated that there was a statistically significant relationship between planning for M&E and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was thus rejected and it was resolved that planning for M&E significantly influences performance of maternal health programmes in Kenyan County Governments.

5.2.2 Stakeholders Engagement in M&E and Performance of Maternal Health Programmes in Kenyan County Governments

The second goal of this study sought to establish how stakeholders' engagement in M&E influences the performance of maternal health programmes in Kenyan County Governments. The stakeholder identification & analysis had a composite mean of

4.232 implying that the respondents agreed that it influences performance of maternal health programmes in Kenyan County Governments. The study findings revealed that key internal and external stakeholders participated in the program are always identified, the most important M&E questions the program will investigate are identified by program managers or M&E specialists with input from all stakeholders and contributions of stakeholders (both negative and positive) and their impact on how information has been used for decision making are documented.

The study also found that Community participation (M=4.101) influences performance of maternal health programmes in Kenyan County Governments. This was showed by the well-developed mechanisms e.g. feedback reports, newsletters to communicate about maternal health M&E activities and decisions to the community, and seamless working of community health workers and the maternal program. Stakeholder communication (M=4.093) was achieved by the strong coordination of stakeholders and partnerships, existence of a stakeholder engagement and communication plan showing the roles of each stakeholder, and the National M&E system information products (reports, website, newsletters and charts).

Collaborations (M=4.076) were not achieved due to the county maternal health program not seeking the opinions of county government officials, donors, CBOs, civil society and CHVs. The staff also does not rely on donors to support site visits to monitor, verify data reported, and supervise health facilities. Advocacy to promote M&E (M=3.959) was also not achieved since there were people who strongly didn't advocate for and support M&E within the county. The staff was also not confident with the county M&E stakeholders' management plans & practices, and did not receive M&E mentorship from the national MoH M&E teams.

The study also found that that there was public participation, data analysis meetings, meetings on new guidelines, sub-county executive management committees, community health committees, donor agencies, and data review and trainings. Moreover, stakeholders were identified at the county through conducting surveys in the community, during meetings, public participation programs, through the ministry of health, forums, assessment and interview process, various projects done, stakeholders family, invitation, doing community entry and meetings, and lobbying. The study also found that various stakeholders were analyzed and allocated roles and

responsibilities by spreading workers to different departments, through forums, by considering the expertise of the stakeholders, special taskforce within the sub-county, by improving the capacity of staff through continuous improvement education, through lobbying, and through stakeholders' fund.

The null hypothesis stated that stakeholder engagement for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments. The study found that there was a strong correlation between the performance of CMHP and stakeholders engagement in M&E ($r=0.838$ and $p=0.001<0.05$). Further, $R^2 = 0.703$ indicating that stakeholders engagement in M&E explains 70.3% of the variations in the performance of maternal health programmes in Kenyan County Governments. The total F statistics ($F=380.236$, $p=3.06E-440.05$) revealed a statistically significant association between stakeholders' participation in M&E and the success of Kenyan county maternal health programs. Therefore, the null hypothesis was rejected, and it was determined that stakeholders' participation in M&E has a significant impact on the performance of maternal health programmes in Kenyan County Governments.

5.2.3 Capacity Building for M&E and Performance of Maternal Health Programmes in Kenyan County Governments

The objective three of the study sought to assess how capacity building for M&E influence performance of maternal health programmes in Kenyan County Governments. The study found that the composite mean of the M&E capacity assessment was 4.319 implying that the majority of the respondents agreed that M&E capacity assessment ($M=4.319$) influences performance of maternal health programmes in Kenyan County Governments. The study found that the gaps in terms of M&E skills and competencies of county M&E staff are identified and incorporated in the capacity building plan, and the staff sought feedback from the clients regularly.

Further, the study found that IT infrastructure had a composite mean of 4.121. This was shown by the unavailability of IT equipment and supplies for maintaining the county maternal health databases, inadequate IT capacity for the department, and lack of staff internet connectivity. All this had an influence on the performance of maternal health programmes in Kenyan County Governments. Moreover, technical expertise in M&E was not achieved since the human resources for maintaining and updating the

county maternal health databases were not adequate. Also, the staff was not familiar with the county integrated monitoring & evaluation guidelines, the maternal health research and evaluation agenda that directs research and evaluation activities did not exist, and the health facility surveys were not conducted regularly.

Achieving the M&E workforce development plan (M=3.915) was also difficult. This could be seen by the lack of opportunities for lateral and vertical career moves for M&E personnel, the lack of overreliance on external stakeholders like NGOs and donors to handle M&E activities, and lack of county maternal health M&E capacity building plan to address capacity gaps in the department. Training and supervision (M=3.664) could not be achieved since there's no county endorsed M&E training curriculum appropriate for personnel at county maternal health program, and there are no plans for ensuring that new skills and staff are utilized effectively. The study found that plans for monitoring and evaluation workforce development included to improve the working conditions of the stakeholders, the provision of resources and increase on the stakeholders since they are few, to produce the best data on maternal health, and to scale up the training programs to more than once a year.

The null hypothesis stated that capacity building for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments. The research found that there was a strong correlation between the performance CMHP and capacity building for M&E ($r=0.796$, $p=0.028<0.05$). Moreover, $R^2 = 0.634$ indicating that capacity building for M&E explains 63.4% of the variations in the performance of maternal health programmes in Kenyan County Governments. The overall F statistics, ($F = 278.870$, $p<5.72E-37<0.05$), indicated that there was a statistically significant relationship between capacity building for M&E and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was thus rejected, and it was resolved that capacity building for M&E significantly influences performance of maternal health programmes in Kenyan County Governments.

5.2.4 Data management for M&E and Performance of Maternal Health Programmes in Kenyan County Governments

The fourth goal of this study was to assess how data management for M&E influences performance of maternal health programmes in Kenyan County Governments. M&E

information use had an overall mean of 4.111; inferring that a majority of participants agreed that M&E information use influences performance of maternal health programmes in Kenyan County Governments. The study found that the decisions were based on evidence/facts, data and health information, there were also processes for sharing data with the national M&E system and international donors and agencies, there were guidelines to support the analysis, presentation and use of data at the facility (e.g. graphs on walls showing cumulative coverage), and the staff used health information system data to make decisions. M&E indicators selection (M=4.121) was also found to influence performance of the CMHP. This was shown by baseline assessments being conducted, performance indicators being identified annually and measured, the staff relying on data for planning and setting maternal health targets, and needs assessments being conducted before any maternal health project is started.

M&E information dissemination (M=3.792) was also achieved. It was evident that they displayed data for monitoring their set targets on charts and graphs, a critical review was done to encourage the use of data for learning, performance enhancement, and decision-making, and the staff share data and information with the national maternal health program. Data storage & analysis (M=3.664) was not achieved since data was not stored in multiple methods and places to ensure there is always a copy available in case one type or location is lost or destroyed, inadequate equipment & software for data, analysis, presentation and data storage, inadequate skills in data analysis in the department, and lack of functional database for capturing and storing maternal health services data.

The research found that maternal health data was collected and displayed through tables, charts, graphs and trends. The data was disseminated to numerous stakeholders through the use of the KDHS2, workshops and report feedbacks. The study found that they experienced challenges such as lack of enough accessibility to internet, inadequate infrastructure for M&E, inadequate resources for implementation of goals and objectives of maternal data, and lack of adequate trained personnel.

The null hypothesis stated that data management for M&E doesn't significantly influence performance of maternal health programmes in Kenyan County Governments. The research found that there is a strong correlation between the performance of CMHP and data management for M&E ($r=0.855$, $p=0.042<0.05$).

Further, $R^2 = 0.729$ indicating that data management for M&E explained 72.9% of the variations in the performance of maternal health programmes in Kenyan County Governments. The overall F statistics, ($F=436.308$, $p<1.07E-47<0.05$), indicated that there was a statistically significant relationship between data management for M&E and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was thus rejected, and it was resolved that data management for M&E significantly influences performance of maternal health programmes in Kenyan County Governments.

5.2.5 Combined Monitoring and Evaluation and Performance of Maternal Health Programmes in Kenyan County Governments

The fifth objective of this study was to examine how combined monitoring and evaluation influence performance of maternal health programmes in Kenyan County Governments. The study found that there was a positive and significant coefficient and the variables. Planning for M&E had a strong and positive correlation on performance of CMHP ($r=0.859$, $p=0.023$), stakeholder engagement for M&E and performance of maternal health programmes were strongly and positively correlated ($r=0.838$, $p=0.001$), capacity building for M&E and performance of CMHP were also strongly and positively correlated ($r=0.796$, $p=0.028$) while data management for M&E and performance of CMHP were revealed to have a strong and positive correlation ($r=0.855$, $p=0.042$).

The null hypothesis stated that combined M&E practices do not significantly influence performance of maternal health programmes in Kenyan County Governments. The overall F statistics, ($F=101.895$, $p<1.02E-42<0.05$), noted that there was a very statistically significant relationship between combined monitoring and evaluation and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was thus rejected, and it was concluded that combined M&E practices significantly influences performance of maternal health programmes in Kenyan County Governments.

5.2.6 Contextual Determinants and Performance of Maternal Health Programmes in Kenyan County Governments

The sixth objective of this study was to establish how contextual determinants influences performance of maternal health programmes in Kenyan County Governments. The study found that the composite mean of the organizational culture was 4.492. The study revealed that corruption was not regularly practiced, this department was very supportive of and adaptable to change, and ethical behavior such as respect for rules and procedures, sanctioning of unethical behaviors, pride in work was practiced. Further, communication structure (M=4.043) influenced the performance of the CMHP. This was shown by the feedback always received from communications made, and the staff holding departmental meetings at least every month. However, there was no clearly defined structure for communication, communicating decisions were not efficient in the maternal health program, and communication channels were not very open here among management and workers. Political-legal environment (M=4.031) was also achieved and was evident that political interference, lack of political goodwill did not affect implementation of M&E practices, there was a legal framework at the county level that mandates M&E for county projects, and the M&E was an audit tool to audit mismanagement and poor performance.

The study also found that Organizational structure (M=3.812) was not achieved. This could be seen by the organizational structure not supporting the M&E system, and there being no organogram with clearly defined roles and responsibilities. The organizational strategy (M=3.060) was not achieved. It was evident since the staff was not familiar with the organizational vision & mission.

The null hypothesis stated that contextual determinants do not significantly influence performance of maternal health programmes in Kenyan County Governments. The research established that there was a strong correlation between the performance of CMHP and contextual determinants ($r=0.638$, $p=0.000<0.05$). The study found that $R^2 = 0.768$ implied that contextual determinants explains 76.8% of the variations in the performance of maternal health programmes in Kenyan County Governments. Further, the overall F statistics, ($F = 533.739$, $p < 5.46E-53 < 0.05$), indicated that there was a statistically significant association between contextual determinants and performance

of maternal health programmes in Kenyan County Governments. The null hypothesis was thus rejected, and it was resolved that contextual determinants significantly influences performance of maternal health programmes in Kenyan County Governments.

5.2.7 Behavioral Determinants and Performance of Maternal Health Programmes in Kenyan County Governments

The objective seven of the study sought to determine how behavioral determinants influence performance of maternal health programmes in Kenyan County Governments. From the findings, the composite mean of workload management was 4.161 which showed that the respondents agreed that workload management influences performance of maternal health programmes in Kenyan County Governments. The study noted that teamwork was always exercised in the maternal health department, and complaints were handled constructively in the department. Implementer's attitude & practices (M=3.978) was also found to influence performance of the CMHP. This was shown by their thought that M&E improves organizational performance, and M&E system is not a political strategy to audit employee performance. Staff motivation (M=3.935) was also achieved and was evident as promotions and remuneration were based on performance and merit, and the staff being highly likely to recommend someone to this organization.

Managerial support (M=3.771) was not achieved. This could be seen since there was insufficient support from top management in the department. The implementer's knowledge, skills & competencies (M=3.297) was also not achieved since the staff did not have good knowledge of using a computer. The research also found that teamwork is always exercised in the maternal health department; excessively high workloads cause mental and physical stress, leading to low performance and reduced productivity among staff; complaints are handled constructively in the department; staff is not always punctual arriving at work on time and leaving on time; the staff are not rewarded or recognized for good work performed; promotions and remuneration are based on performance and merit; staff is not committed to improving the health status of the patients; the staff is not highly likely to recommend someone to this organization; the changes suggested by employees are usually implemented; the supervisor is open to constructive criticism; there is insufficient support from top

management in the department; the management sought input from employees on major decisions; adapting to change is easy in the county maternal health program.

The null hypothesis stated that behavioral determinants do not significantly influence performance of maternal health programmes in Kenyan County Governments. The study found that there was a strong correlation between the performance of maternal health programmes and behavioral determinants ($r=0.821$, $p=0.001<0.05$). Moreover, $R^2 = 0.710$ indicated that behavioral determinants explains 73% of the variations in the performance of maternal health programmes in Kenyan County Governments. Further, the overall F statistics, ($F=393.905$, $p<4.08E-45<0.05$), noted that there was a statistically significant relationship between behavioral determinants and performance of maternal health programmes in Kenyan County Governments. The null hypothesis was thus rejected, and it was resolved that behavioral determinants significantly influences performance of maternal health programmes in Kenyan County Governments.

5.2.8 Moderating Influence of Contextual Determinants on Relationship between M&E Practices and Performance of CMHP

The null hypothesis stated that contextual factors do not significantly moderate the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments. The study discovered that when contextual determinants were introduced into the relationship, and the interaction terms in model 3 rised the R square by 0.141. This means that the interaction amid contextual determinants and combined M&E practices describes 14.1% alterations in performance of CMHP. F was at $F(5, 157) = 196.910$, $p<9.97E-66<0.05$) and thus the difference in the model 1 and model 3 shows that contextual determinants moderates the relationship between M&E practices and performance of maternal health programmes in Kenyan county governments.

The null hypothesis was therefore rejected, and it was resolved that contextual determinants significantly moderate the relationship between monitoring and evaluation and performance of maternal health programmes in Kenyan County Governments

5.2.9 Moderating Influence of Behavioral Determinants on Relationship between M&E Practices and Performance of CMHP

The null hypothesis stated that behavioural determinants do not significantly moderate the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments. The research found that after introduction of behavioural determinants into the link, and the interaction term in model 3 rose the R square by 0.066. This denotes that the collaboration between behavioral determinants and combined M&E practices describes 6.6% variations in performance of CMHP. F was at $F(5, 157) = 166.595, p < 6.91E-61 < 0.05$ and thus the difference in the model 1 and model 3 shows that behavioral determinants moderates the relationship between M&E practices and performance of maternal health programmes in Kenyan county governments. The null hypothesis was therefore rejected, and it was resolved that behavioral determinants significantly moderate the relationship between monitoring and evaluation and performance of maternal health programmes in Kenyan County Governments.

5.3 Conclusions

For each objective and accompanying hypothesis, this section gives conclusions based on the study's findings. The conclusions are based on the study's key findings.

5.3.1 Planning for M&E and Performance of Maternal Health Programmes in Kenyan County Governments

The first objective of the study was to assess how planning for M&E influences performance of maternal health programmes in Kenyan County Governments. According to the findings, M&E planning has a statistically significant impact on the success of Kenya's County Maternal Health Programs. On the other side, the study found that due to the delay in funding that assist M&E activities, the programs encounter obstacles in fund disbursement processes and procedures. Furthermore, programs encounter challenges in obtaining funding on time to ensure that M&E activities run well.

5.3.2 Stakeholders Engagement in M&E and Performance of Maternal Health Programmes in Kenyan County Governments

The second research objective was to establish how stakeholders' engagement in M&E influences the performance of maternal health programmes in Kenyan County Governments. The study concluded that stakeholders' engagement in M&E has a statistically significant influence on performance of maternal health programmes in Kenyan County Governments. The study deduced that stakeholders mostly participated in M&E through stakeholder review meetings to be provided with information on the progress of work regarding projects and programmes. This level of participation can best be described as consultation and tokenistic which does not represent deeper levels of participation. Keeping some members of the grassroots out of M&E raised questions of transparency and accountability in the execution of projects and programmes. In the meanwhile, effective stakeholder participation in project and program monitoring and evaluation can promote transparency, accountability, project and program sustainability, and ensure favorable community stakeholder attitudes about programs. This can be accomplished by enlisting the participation of relevant stakeholders in ways other than information dissemination and dialogue.

5.3.3 Capacity Building for M&E and Performance of Maternal Health Programmes in Kenyan County Governments

The third research objective was to establish how capacity building for M&E influences performance of maternal health programmes in Kenyan County Governments. The study concluded that capacity building for M&E has a statistically significant influence on performance of maternal health programmes in Kenyan County Governments. The study concluded that the M&E employees had acquired skills and knowledge in a variety of activities through various trainings. M&E was affected by the level of training, therefore higher levels of training lead to a more effective M&E system.

5.3.4 Data Management for M&E and Performance of Maternal Health Programmes in Kenyan County Governments

The fourth research objective sought to examine how data management for M&E influences the performance of maternal health programmes in Kenyan County Governments. The study concluded that data management for M&E has a statistically significant influence on performance of maternal health programmes in Kenyan County Governments. The study deduced that developing effective systems for consistently collecting and recording data, securely storing data, backing up data, cleaning data, and changing data so it can be transferred across different types of software for analysis are all part of successful data management. Data quality assurance – the methods and procedures used to ensure data quality – is intrinsically connected to good data management. Using data that is unknown or of poor quality can lead to poor policy and program decisions. Each phase in the data cycle, including data collection, aggregation and reporting, analysis and use, and dissemination and feedback, should include data quality assurance (DQA).

5.3.5 Combined Monitoring and Evaluation and Performance CMHP in Kenya

The fifth research objective was to examine how combined monitoring and evaluation influence the performance of maternal health programmes in Kenyan County Governments. The study concluded that the combination of planning for M&E, stakeholders engagement in M&E, capacity building for M&E and data management for M&E have a statistically significant influence on performance of maternal health programmes in Kenyan County Governments. The study deduced that M&E is paraphernalia for effective development, as evidenced by the growing utilisation of the practice. It is incumbent upon monitoring and evaluation professionals to ensure that they guide quality assurance processes, through a multifarious of monitoring activities. One of the principles of M&E is learning and accountability.

5.3.6 Contextual Determinants and Performance of Maternal Health Programmes in Kenyan County Governments

The sixth research objective sought to assess how contextual determinants influence the performance of maternal health programmes in Kenyan County Governments. Therefore, the study resolved that contextual determinants have a statistically significant impact on performance of maternal health programmes in Kenyan County Governments. The study deduced that the department should be very supportive of and

adaptable to change and that there is need for a legal framework that mandates M&E for county projects.

5.3.7 Behavioral Determinants and Performance of Maternal Health Programmes in Kenyan County Governments

The seventh research goal sought to assess how behavioral determinants influence the performance of maternal health programmes in Kenyan County Governments. Therefore, the study resolved that behavioral determinants have a statistically significant influence on performance of maternal health programmes in Kenyan County Governments. The research concluded that M&E system is not a political strategy to audit employee performance. Further, the study concluded that excessively high workloads cause mental and physical stress, resulting to poor performance and reduced productivity among staff.

5.3.8 Moderating Influence of Contextual Determinants on Relationship between M&E Practices and Performance of CMHP

The eighth objective sought to establish the moderating influence of contextual determinants moderates on the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments. The study concluded that contextual variables are critical in mediating the relationship between M&E practices and CMHP performance in Kenya because of their influence. According to the findings, the goal of structure in health authorities is to divide work, responsibilities, and obligations among the organization's members, thereby coordinating their actions so that they all work toward the same goals. A company's structure includes its positions, authority to carry out work obligations, hierarchical grouping of jobs, manager control scope, and coordination procedure. As a result, decisions about the implementation of a technology plan should be made in light of the business structure.

5.3.9 Moderating Influence of Behavioral Determinants on Relationship between M&E Practices and Performance of CMHP

The ninth objective sought to establish the moderating influence of behavioral determinants moderates on the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments. The study resolved

that behavioral determinants are very important since they moderate the relationship between M&E practices and performance of maternal health programmes in Kenyan County Governments. The study concluded that the impact evaluation whole process and above all the analysis and results interpretation may be highly enhanced by intended beneficiaries' participation. Further, the period that staff takes in meeting personal goals in Health Officials may be utilized as an indicator of attitude towards job of an individual.

5.4 Contributions of the Study to Knowledge

Contributions of this study to knowledge are as tabulated in Table 5.1;

Table 5.1: Contributions of the Study to Knowledge

Objective	Findings	Conclusion	Contribution to Knowledge
To assess how planning for M&E influences performance of County Maternal Health Programmes in Kenya.	Planning for M&E has an influence on performance of County Maternal Health Programmes in Kenya	Planning for M&E has a statistically significant influence on performance of County Maternal Health Programmes in Kenya.	The study findings demonstrated empirical evidence that planning for M&E significantly and positively influence on performance of County Maternal Health Programme in Kenya.
To establish how stakeholder engagement in M&E influences the performance of County Maternal Health Programmes in Kenya.	Stakeholders engagement in M&E has an influence on performance of County Maternal Health Programmes in Kenya	Stakeholders' engagement in M&E has a statistically significant influence on performance of County Maternal Health Programmes in Kenya.	The findings provided empirical evidence that stakeholder's engagement in M&E influence on performance of County Maternal Health Programme in Kenya positively and significantly.

<p>To assess how capacity building for M&E influences performance of maternal health programmes in Kenyan County Governments.</p>	<p>Capacity building for M&E has an influence on performance of maternal health programmes in Kenyan County Governments</p>	<p>Capacity building for M&E has a statistically significant influence on performance of maternal health programmes in Kenyan County Governments.</p>	<p>The findings of the study have empirically demonstrated that capacity building for M&E influence on performance of maternal health programmes in Kenyan County Governments positively.</p>
<p>To establish how data management for M&E influences performance of maternal health programmes in Kenyan County Governments.</p>	<p>Data management for M&E has an influence on performance of maternal health programmes in Kenyan County Governments</p>	<p>Data management for M&E has a statistically significant influence on performance of maternal health programmes in Kenyan County Governments.</p>	<p>The empirical study findings provided evidence that data management for M&E influence performance of maternal health programmes in Kenyan County Governments significantly.</p>
<p>To examine how combined monitoring and evaluation practices influences the performance of County Maternal Health Programmes in Kenya.</p>	<p>Combined monitoring and evaluation practices have an influence on performance of County Maternal Health Programmes in Kenya</p>	<p>Combined monitoring and evaluation practices have a statistically significant influence on performance of County Maternal Health Programmes in Kenya.</p>	<p>The findings empirically revealed that combined monitoring and evaluation significantly influence on performance of maternal health programmes in Kenyan County Governments.</p>
<p>To assess how contextual determinants, influence the performance of maternal health programmes in Kenyan County Governments.</p>	<p>Contextual determinants has influence the performance of maternal health programmes in Kenyan County Governments</p>	<p>Contextual determinants have a statistically significant influence on performance of maternal health programmes in Kenyan County Governments.</p>	<p>The study empirically established that contextual determinants influence the performance of maternal health programmes in</p>

			Kenyan County Governments significantly.
To determine how behavioral determinants influence performance of maternal health programmes in Kenyan County Governments	Behavioral determinants has influence the performance of maternal health programmes in Kenyan County Governments	Behavioral determinants have a statistically significant influence on performance of maternal health programmes in Kenyan County Governments.	The study empirically established that behavioral determinants influence the performance of maternal health programmes in Kenyan County Governments significantly.
To establish the moderating influence of contextual determinants on relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya	Contextual determinants has a moderating influence on relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya	Contextual determinants are very important since they moderate the relationship between monitoring and evaluation and performance of maternal health programmes in Kenyan County Governments	The empirical study findings provided evidence that contextual determinants are very important since they moderate relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya

<p>To establish the moderating influence of behavioral determinants on relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya</p>	<p>Behavioral determinants has moderating influence on relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya</p>	<p>Behavioral determinants are very important since they moderate the relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya</p>	<p>The empirical study findings provided evidence that behavioral determinants are very important since they moderate relationship between monitoring and evaluation practices and performance of County Maternal Health Programmes in Kenya</p>
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5.5 Limitations of the Study

This study covered nine counties in Kenya and some respondents were unwilling to disclose the information fearing it might be used against them. However, the respondents were assured of the confidentiality of their responses and the purpose of the data for academic purposes was explained to them. There was inadequate data on County Maternal Health Programmes since they have been in operation for less than 10 years. This was overcome by combining diverse sources of primary data by use of different tools such as questionnaires, interview guides and observation guide administered to different stakeholders in the program to get comprehensive information. Also the respondents were not fully conversant with M&E practices influencing CMHP. This was overcome by the use of simplified statements describing the aspects of M&E under study that were easily understood by the respondents in all cadres. In the course of obtaining data the study encountered information that had many gaps. This was overcome through the application of triangulation approaches of data collection in which data was collected from many sources and then collated to authenticate its accuracy.

5.6 Recommendations of the Study

The study's suggestions are presented in this section, which are based on the research findings, analysis, interpretation, and debate. This covers policy, practice, technique and theory recommendations, as well as proposals for future research.

5.6.1 Recommendations for Policy

The study recommends that the policymakers should devise and implement a comprehensive capacity-building strategy that includes actors at all levels. The Costed M&E Capacity Improvement Plan will require consensus once the guidelines have been accepted and implemented by the intergovernmental forum and the appropriate leadership at the national and county levels. This plan will serve as the foundation for lobbying and engagement with the government at the national and county levels to boost M&E capacity-building allocations and direct investments. It will also serve as a foundation for convergence and will decrease unnecessary M&E capacity-building investments.

In order to keep the reform momentum going, a long-term platform for M&E advocacy and oversight is required. TWGs for M&E will be crucial vehicles for rallying support

for sector-wide M&E goals. They will provide channels for reciprocal accountability among stakeholders implementing different components of the M&E system once they are fully functional.

To ensure that M&E reforms in the health sector are long-lasting, significant resources must be allocated to building robust and dynamic technical coordinating institutions that can support the agenda for change at all times and levels. Advocacy should begin with a stakeholders' roundtable on M&E, which was also used to develop an annual capacity improvement plan with full resource commitment from different partners and stakeholders, using the platform of the health data collaborative and other TWGs for involving leadership at the MOH and county level. The Health Sector M&E TWG shall bring together national development partners to debate the HDC strategy for M&E strengthening within the cooperation.

5.6.2 Recommendations for Practice

The study established that the planning for M&E has an influence on performance of maternal health programmes in Kenyan County Governments. Funds for assisting M&E activity by organizations are being released slowly. As a result, for the program's success, the management team should create an effective approach as well as raise awareness of M&E activities. The program management should emphasize to the M&E department that the activities should be planned systematically prior to the M&E work plan, and that the budget request should be submitted as soon as possible to avoid the lengthy review and approval processes from the Finance and economic planning departments at the county level.

On the influence of monitoring planning, the program should improve on their planning by involving all relevant stakeholders by catering for their influence, interests and impacts. People should be trained on how to prepare monitoring plans and other documents required in projects. Staff charged with monitoring and evaluation should have technical capabilities, staff working on monitoring and evaluation should be dedicated to the function, and roles and responsibilities of monitoring and evaluation professionals should be outlined from the outset of the projects, according to the study.

The study discovered that stakeholders' participation in M&E had a beneficial impact on the functioning of Kenya's County Maternal Health Programs. As a result, more

training and knowledge about stakeholder engagement in M&E is required. In order to design a work breakdown structure for the project, essential stakeholders must have the relevant qualifications and expertise. This will ensure that all stakeholders have the necessary skills and expertise, as well as get ongoing training to keep them current in the industry.

Because M&E is a new field in CMHP in Kenya, the study recommends that training is essential in developing M&E human capacity, which will allow M&E systems to be managed effectively. As a result, more M&E formal and refresher trainings should be included in the programs to help M&E professionals develop their skills.

Further, the County Maternal Health Programs conduct routine data quality assurance (RDQA) in order to identify M&E areas where their personnel are having difficulty and to offer appropriate training in those areas. Investing in ICT in County Maternal Health programs, such as modern data analysis software (such as SPSS and STATA) and web-based servers (cloud), ensures the accuracy, timeliness, and security of project data and information. The study advises that main beneficiaries be included in critical M&E areas such as data collecting, M&E data dissemination, and decision making to improve the effectiveness of MHP operations utilizing quality M&E data and information. This should be done with caution at least once a year to ensure that their engagement does not cause project delays.

To ensure that M&E reforms in the health sector are long-lasting, significant resources must be allocated to building robust and dynamic technical coordinating institutions that can support the agenda for change at all times and levels. Promoting M&E advocacy should begin with a stakeholder meeting that also served to develop an annual capacity improvement plan with full resource commitment from various partners and stakeholders, utilizing the health data collaborative's platform and other TWGs to engage MOH and county-level leaders.

5.6.3 Recommendations for Methodology

The study used both descriptive survey and correlational research designs. The researcher was able to conduct a study on the social and scientific phenomena that occur in context and behavioral, monitoring and evaluation techniques, and performance of CMHP thanks to these designs. The designs are recommended

because they are suitable for collecting data through questionnaires and interviews, as well as allowing for the measurement of correlation between the study's important variables or hypothesis testing.

The mixed research approach in this study was guided by a pragmatism paradigm. This allowed the study to weigh the advantages and disadvantages of two methodologies. The study purpose and specific objectives in monitoring and assessment techniques and performance of CMHP, which incorporate both social and scientific features, were the focus of the research. This methodology is recommended because it allows the researcher to use research procedures to characterize research phenomena in both social and natural environments.

In this study, the program theory helped the staff comprehend what, how, and why the project is striving to achieve in terms of M&E planning, stakeholder involvement, M&E capacity building, and M&E data utilization. The relationship between independent and dependent variables could be demonstrated using program theory. If all of the factors examined in the study are taken into account, the M&E system will have a long-term impact, as stressed by program theory.

The study targeted 8 regional blocks in Kenya (Central, Coast, Eastern, Nairobi, North Eastern, Nyanza, Rift Valley and Western). These regional blocks are recommended because they signified the main regional blocks of the country and therefore information from these blocks meant that data was counted to be collected from the whole country. These were selected since they were able to give relevant information on County Maternal Health Programmes in Kenya.

5.6.4 Recommendations for Theory

The current study contributes to theoretical literature by supporting the proposition that improved methods of monitoring and evaluation increase the performance of maternal health programmes in Kenyan County Governments when they feel the management is save and is focused to acquire something of value. Furthermore, the study supports the theoretical proposition of the theory of constraints that assists organizations in achieving their goals by providing a mechanism to gain better control of their initiatives.

Finally, this study supports the contingency theory which is used to manage evaluation; it illustrates the program's ability to solve an issue by attending to the requirements in the need appraisal. It also provides instruments for determining assessment effect zones. Thus, the context in which an organization operates determines the optimum method for it to organize.

5.7 Suggestions for Further Research

Future research will need to be carried in other industries or sectors and nations in order to show if the relationship between monitoring practices and project performance can be generalized. According to the literature, similar research on monitoring and evaluation adoption, implementation, challenges, barriers, aligning planning for M&E, stakeholder engagement, capacity building for M&E, and M&E data use should be conducted in other industries and countries in order to determine whether the relationship between monitoring practices and project performance exists.

The study also focused only on contextual determinants and behavioral determinants as the moderating variables. As a result, the study suggests that more research be done on other moderating variables affecting the relationship between monitoring and evaluation and performance of CMHP like compliance with legal framework.

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APPENDICES

Appendix I: Transmittal Letter



UNIVERSITY OF NAIROBI
OPEN, DISTANCE e-LEARNING CAMPUS
SCHOOL OF OPEN AND DISTANCE LEARNING
DEPARTMENT OF OPEN LEARNING
NAIROBI LEARNING CENTRE

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Our Ref:

Telephone: 318262 Ext. 120

REF: UON/ODeL/NLC/31/457

Main Campus
Gandhi Wing, Ground Floor
P.O. Box 30197
NAIROBI

8th January, 2020


TO WHOM IT MAY CONCERN

RE: JOHN GATIMU -REG NO: L83/97887/2015

This is to confirm that the above named is a student at the University of Nairobi, Open Distance and e-Learning Campus, School of Open and Distance learning, Department of Open Learning pursuing Doctor of Philosophy in Project Planning and Management.






He has successfully completed the coursework and currently working on Research Thesis titled "Monitoring and Evaluation Practices, Contextual and Behavioural Determinants and Performance of County Maternal Health Programmes: A Case of County Governments in Kenya."

Any assistance accorded to him will be highly appreciated.


CAREN AWILLY
CENTRE ORGANIZER
NAIROBI LEARNING CENTRE



Appendix II: Research Permit from NACOSTI

 <p>REPUBLIC OF KENYA National Commission for Science, Technology and Innovation</p>	 <p>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION.</p>
Ref No: 505685	Date of Issue: 03/February/2020
RESEARCH LICENSE	
	
<p>This is to Certify that Mr., John Kamau of University of Nairobi, has been licensed to conduct research in Bungoma, Garissa, Kajiado, Kiambu, Kilifi, Kisumu, Nairobi, Uasin-Gishu on the topic: MONITORING AND EVALUATION PRACTICES, CONTEXTUAL AND BEHAVIOURAL DETERMINANTS AND PERFORMANCE OF COUNTY MATERNAL HEALTH PROGRAMMES: A CASE OF COUNTY GOVERNMENTS IN KENYA for the period ending : 03/February/2021.</p>	
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Appendix III: Research Authorization Letters

COUNTY GOVERNMENT OF KIAMBU DEPARTMENT OF HEALTH SERVICES

All correspondence should be addressed to HRDU
HRDU – HUMAN RESOURCE DEPARTMENT
Email address: hrdu@kiambu.go.ke
hrdu@kiambu.go.ke
Tel. Nos: 0732941818
0732974888



HEALTH RESEARCH AND DEVELOPMENT
UNIT
P. O. BOX 2344 – 00900
KIAMBU

Ref. No.: KIAMBU/HRDU/20/08/19/RA_KAMAU

Date: 19th AUGUST 2020

TO WHOM IT MAY CONCERN

RE: **CLEARANCE TO CONDUCT RESEARCH IN KIAMBU COUNTY**

Kindly note that we have received a request by Mr. John Kamau of Nairobi University to carry out research in Kiambu County, the research topic being on **"Monitoring and Evaluation Practices, Contextual and Behavioural Determinants and Performance of County Maternal Health Programmes: A Case of County Governments In Kenya "**

We have duly inspected his documents and found that he has been cleared by the NACOSTI to carry out the research for a period ending **3rd February 2021**. He thus does not need any further clearance with another regulatory body in order to conduct research within the county of Kiambu.

However, it is incumbent upon the institution where he is carrying out research to ensure that he receives adequate supervision during the process of conducting the research. This note also accords him the duty to provide a feedback on his research to the county at the conclusion of his research.

DR. MWANCHI KWASA
COUNTY CLINICAL RESEARCH OFFICER
KIAMBU COUNTY



**NAIROBI
METROPOLITAN
SERVICES**



Directorate of Health Services

REF: EOP/NMS/HS/7/VOL.1/RS/13

DATE: 25th August, 2020

Mr. John Gatimu
Principal Investigator
P. O. Box 19586 - 00160
Nairobi

Dear Sir,

RE: RESEARCH AUTHORIZATION

This is to inform you that the Nairobi Metropolitan Services - Health Directorate's Research working group reviewed the documents on the study titled "Monitoring and Evaluation Practices, Contextual and Behavioral Determinants and Performance of County Maternal health Programmes: A Case of County Governments in Kenya".

I am pleased to inform you that you have been authorized to undertake the study in Embakasi Central, Nairobi. The researcher will be required to adhere to the ethical code of conduct for health research in accordance to the Science Technology and Innovation Act, 2013 and the approval procedure and protocol for research for Nairobi.

On completion of the study, you will submit one hard copy and one copy in FDF of the research findings to the Research Technical Working Group. By copy of this letter, the Medical Superintendents – Mbagathi Hospital, Pumwani Maternity Hospital & Mama Lucy Kibaki Hospital to accord you the necessary assistance to carry out this research study.

Yours sincerely,

**DR. OUMA OLUKA
FOR DIRECTOR HEALTH SERVICES**

- Cc:
- Medical Superintendent
 - Mbagathi Hospital
 - Mama Lucy Kibaki Hospital
 - Pumwani Maternity Hospital

Kenya: International Convention Centre - P.O. Box 89130-30102, GPO, Nairobi, Kenya
Tel: +254 20 261771-4/3
Email: information@nms.go.ke | Web: www.nms.go.ke

COUNTY GOVERNMENT OF KIAMBU
DEPARTMENT OF HEALTH SERVICES
GATUNDU LEVEL 5 HOSPITAL

Telegram: "MEDICAL" Gatundu
Telephone: 0786916894
When replying please quote
Email Address



GATUNDU LEVEL 5 HOSPITAL
P.O. BOX 84 - 01030
GATUNDU
gatundul4h@gmail.com

Ref:GTD/GEN/37/VOL.1/114

17TH AUGUST 2020

JOHN GATIMU
REG NO: L83/97887/2015

RE: AUTHORITY TO COLLECT DATA

Your application to conduct research on *"Monitoring and evaluation practices, contextual and behavioral determinants and performance of county maternal health programs"* in this institution has been granted.

During the entire period of your research, you will be reporting to the Nursing Incharge MCH/FP, who will be the key Hospital Co-ordinator during the data collection. She will support you access any information that may be relevant for the successful undertaking of the research.

Finally, you are expected to adhere to all the regulations relating to confidentiality of patient information, ethics in research as well as all norms regarding conduct in a Public Health Institution.

Wishing you a successful research.

DR. CYRUS MUMBURA
MEDICAL SUPERINTENDENT
GATUNDU LEVEL 5 HOSPITAL





THE PRESIDENCY
MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telephone: 055- 30326
FAX: 055-30326
E-mail: ccbungoma@yahoo.com
When replying please Quote

Office of the County Commissio
P.O. Box 550 - 50200
BUNGOMA

04th September, 2020

REF:ADM.15/13/VOL.111/41

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION – MR JOHN KAMAU

Reference is here made on the letter Ref; NACOSTI/P/20/3458 dated 03rd February 2020 from the National Commission for Science, Technology and Innovation on the above subject.

John Kamau from University of Nairobi, has sought authority to carry out research on, *“Monitoring and Evaluation Practices, Contextual and Behavioural Determinants and Performance of County Maternal Health Programmes in Bungoma county, Kenya”*; for a period ending 3rd February, 2020.

This is therefore to introduce him and his team and ask for your cooperation and support as they undertake the research.


Leonard N. Walukhu
For: COUNTY COMMISSIONER
BUNGOMA COUNTY



COUNTY GOVERNMENT OF KAJIADO



DEPARTMENT OF HEALTH SERVICES
OFFICE OF THE COUNTY DIRECTOR OF HEALTH SERVICES
P. O. BOX 31, KAJIADO

REF: CGK/MEDICAL SERVICES/01/VOL1/620

27TH AUGUST 2020

MR. JOHN KAMAU
P. O. BOX 19586-00100
UNIVERSITY OF NAIROBI

RE: RESEARCH AUTHORIZATION

Reference is made to your Research License dated 3rd February 2020 from the National Commission for Science, Technology and Innovation reference no. 505685 and a letter addressed to this office requesting for permission to collect research Data at Kajiado County

The Department has no objection in you carrying out research on 'Monitoring and Evaluation Practices Contextual and Behavioural Determinants and Performance of County Maternal Health Programmes: a case of County Governments In Kenya'. You are however required to share findings of your research with this office.

Thank you.


DR. EZEKIEL KAPKONI
COUNTY DIRECTOR OF HEALTH SERVICES



CC:

CHIEF OFFICER FOR MEDICAL SERVICES
CHIEF OFFICER FOR PUBLIC HEALTH & SANITATION SERVICES
THE MEDICAL SUPERITENDENTS, KAJIADO COUNTY HOSPITAL
THE MEDICAL SUPERITENDENT, KITENGELA SUBCOUNTY HOSPITAL
THE MEDICAL SUPERITENDENT, LOITOKITOK AND ONGATA RONGAI SUBCOUNTY HOSPITAL



REPUBLIC OF KENYA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY
State Department of Education – Bungoma County

When Replying please quote
e-mail: bungomacde@gmail.com

County Director of Education
P.O. Box 1620-50200
BUNGOMA

Ref No: BCE/DE/19/VOL.1/125

Date: 4th September, 2020

TO WHOM IT MAY CONCERN

**RE: AUTHORITY TO CARRY OUT RESEARCH – MR. JOHN KAMAU - REF:
NACOSTI/P/20/3458**

The bearer of this letter Mr. John Kamau is a student of University of Nairobi. He has been authorized to carry out research on *"Monitoring and Evaluation practices, contextual and behavioural determinants and performance of county maternal health programmes: A case of County Governments in Kenya "* for the period ending 3rd February, 2021.

Kindly accord him the necessary assistance.

For 

CHRISTINE OWINO
FOR: COUNTY DIRECTOR OF EDUCATION
BUNGOMA COUNTY



**NAIROBI
METROPOLITAN
SERVICES**



Mbagathi Hospital, P.O Box 20723 - 00202
Email: mbagathi@nmsi.org
Tel: 072722808, 2724712, 2725791

DATE: 10th Sept 2020

John Gatimu

UON

RE: RESEARCH AUTHORIZATION

This is in reference to your application for authority to carry out a research on *"Monitoring & Evaluation practices, Contextual & Behavioural Determinants & Performance of County Maternal Health Programmes: A Case of County Governments in Kenya."*

I am pleased to inform you that your request to undertake research in the hospital has been granted.

On completion of the research you are expected to submit one hard copy and one soft copy of the research report/ thesis to this office.



Dr. David Kimutai

**Chairman - Research & Training Committee
Mbagathi Hospital.**

REPUBLIC OF KENYA



COUNTY GOVERNMENT OF BUNGOMA
MINISTRY OF HEALTH
OFFICE OF THE COUNTY DIRECTOR
HEALTH



Telegrams: "MEDICAL", BUNGOMA
Telephone: (055) 30230 Fax: (055) 30650
E-mail: docakatu@yahoo.com
When replying please quote

COUNTY DIRECTOR OF HEALTH
BUNGOMA COUNTY
P.O. BOX 18-50200
BUNGOMA

Ref: CG/BGM/CDH/RESRC/VOL.II/140

DATE: 07TH SEPTEMBER, 2020.

MR. JOHN KAMAU
UNIVERSITY OF NAIROBI
SCHOOL OF OPEN AND DISTANCE LEARNING
P.O BOX 30197,
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your request for authority to carry out a research on "**Monitoring and Evaluation Practices, Contextual and Behavioural Determinants and Performance of County Maternal Health Programmes in Bungoma County**", I am pleased to inform you that you have been authorized to conduct your research as mentioned in your letter.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the County Director of Health. The soft copy of the same should be submitted through the online Research Information system.

Thank you


COUNTY DIRECTOR OF HEALTH
BUNGOMA COUNTY
P. O. Box 18-50200
BUNGOMA

MR. ROBERT MOSE
FOR COUNTY DIRECTOR OF HEALTH-MS
BUNGOMA COUNTY.

CC: Med Supts: Bungoma County Referral Hospital
Webuye County Hospital
Kimilili Sub County Hospital

Appendix IV: Sampled Counties

Case #	Stratum (Region)	Counties	Counties per cluster	Counties Studied	Counties Sampled
1	Central	Nyandarua Laikipia Nyeri Kirinyaga Murang'a Kiambu	6	1	Kiambu
2	Coast	Mombasa Kwale Kilifi Tana River Lamu Taita-Taveta	6	1	Kilifi
3	Eastern	Marsabit Isiolo Meru Tharaka-Nithi Embu Kitui Machakos Makueni	7	1	Machakos
4	Nairobi	Nairobi	1	1	Nairobi
5	North Eastern	Garissa Wajir Mandera Marsabit	4	1	Garissa
6	Nyanza	Siaya Kisumu Homa Bay Migori Kisii Nyamira	6	1	Kisumu
7	Rift Valley	Turkana West Pokot Samburu Trans Nzoia Uasin Gishu Elgeyo- Marakwet Nandi Baringo Nakuru Narok Kajiado Kericho Bomet	13	2	Kajiado, Nakuru

8	Western	Kakamega Vihiga Bungoma Busia	4	1	Bungoma
			47	9	

Appendix V: Research Questionnaire For County Maternal Health Program Staff

QUESTIONNAIRE FOR COUNTY MATERNAL HEALTH PROGRAM STAFF

INTRODUCTION

This questionnaire is a research instrument designed to collect information on the *Monitoring and Evaluation Practices, Contextual and Behavioral Determinants and Performance of County Maternal Health Programmes in Kenya*.

The information collected will be used for academic purposes only and it is expected that the findings from this study will make a significant contribution towards enhancing service delivery in maternal health programmes in Kenya. The information will be handled with confidentiality and with academic professionalism. Kindly fill in the information as directed in the various sections provided.

SECTION A: BACKGROUND INFORMATION

1. What is your **gender**? Male: Female:
2. What is your **age** group? 18-25 26-35 36-45 Above 45
3. What is your **religious** affiliation?
Christian Protestant Christian Catholic Other Christian
Muslim Hindu None religious Other (Specify) _____
4. State your highest level of **academic** qualifications.
Secondary School Certificate Diploma Degree Masters
PHD
5. How long in **years** have you worked with County Maternal Health Programmes?
Less than 2 years Between 2 and 4 years More than 5 years
6. What is your **profession**?

Nurse [] Clinical Officer [] Medical officer [] Nutritionist []
 Lab tech[] Pharmacist [] IT/Data Specialist [] Counselor []
 Other (Specify) [].....

7. Which sections do you cover? Select all that apply

- ANC Growth monitoring/Child welfare
 Immunization
- PMTCT Counselling
 Nutrition
- Health Records Phlebotomy Pharmacy
- Family Planning Other (Specify).....

SECTION B: PERFORMANCE OF MATERNAL HEALTH PROGRAMMES

8). What is your level of agreement with the following statements on performance of maternal health programs at your county?

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree				
	In our County Maternal Health Program				1	2	3	4	5
a)	Staff is responsive and willing to help patients and provide prompt service to requests, questions or complaints.								
b)	Employees inspire trust and confidence by ensuring confidentiality of patient information.								
c)	The physical layout, tools, machines and the facilities are not clean and customer friendly.								
d)	We are reliable, performing the promised services dependably and accurately paying attention to the results.								
e)	Our staff are empathetic, caring, paying personal attention, and providing individualized services to customers.								
f)	Maternal mortality rate is low.								
g)	The practice of exclusive breastfeeding for six months is high.								
h)	Full child Immunization coverage is low.								

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
i)	Proportion of demand for family planning services is high.				
j)	Antenatal and postnatal care coverage is high.				
k)	Proportion of births assisted by qualified health staff is low.				
l)	PMTCT ARV prophylaxis rate for infant and mother is high				
m)	The under-five mortality rate is low.				
n)	Vitamin A supplementation coverage is high.				
o)	Proportion of children who are stunted is low.				
p)	There is low employee turnover				
q)	Our patients are contented with our services.				
r)	I am satisfied as an employee in our department.				
s)	Service delivery to customers is not effective in our department.				
t)	Patients take a lot of time to be served and discharged.				
u)	We have adequate healthcare providers in our department.				
v)	Activities are performed in the timelines established				
w)	Our maternal health program is cost efficient- budget utilized as planned.				
x)	Materials such as forms, printing papers, registers, PPE materials are always available.				
y)	There is frequent shortages of essential supplies and commodities for patients care				

SECTION C: PLANNING FOR M&E

9) What is your level of agreement with the following statements on planning for M&E in relation to performance of your county maternal health program?

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
a)	There is an M&E unit/department/section				
b)	There is clear adequate budgetary allocation for M&E				
c)	Adequate M&E infrastructure for M&E programming does not exist.				
d)	There are organized resource mobilization activities for supporting M&E planning.				
e)	The program applies for donor funding to supporting our maternal health program				
f)	Program managers (or M&E specialists) are prepared to design tools, instruments, and methodologies required to gather the needed information.				
g)	Theory of Change framework for our maternal health program does not exist.				
h)	Logical Framework to monitor our maternal health programs implementation exists				
i)	Results Framework to provide clarity around our key program objectives does not exist.				
j)	We understand the political and administrative structures of the community where our maternal programs take place.				
k)	There are no standardized reporting forms for use by those delivering same maternal health services.				
l)	We have a detailed design of the maternal health program implementation plan.				
m)	Annual Work Plans to guide our activities are prepared.				
n)	Participatory planning is not used when preparing our work plans.				
o)	Potential risks and unexpected circumstances that might arise during program implementation are identified.				

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
p)	An M&E policy/framework exists that guides M&E activities.				
q)	Roles and responsibilities of maternal health program staff and stakeholders are clearly defined.				
r)	I do not know the UN sustainable development goal (SDGs), the targets and indicators on maternal health.				
s)	M&E components and strategies are included in the county maternal health policy				
t)	I'm confident with the county planning for M&E activities.				
u)	We have clear maternal health objectives, mission & vision				
v)	A county health sector strategic plan which has M&E component does not exist.				
w)	There are short-term and long-term county maternal health targets				
x)	We have a clear sustainability plan for our maternal health interventions				
y)	Our MCH program is not well aligned with the Kenya health strategic priorities and the sustainable development goals.				

SECTION D: STAKEHOLDER ENGAGEMENT FOR M&E

10) What is your level of agreement with the following statements on Stakeholders Engagement in M&E on performance of maternal health programmes in Kenya?

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
a)	There are people who strongly advocate for and support M&E within the county				
b)	There's a maternal health M&E Technical Working Group (TWG)/committee at the county.				

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree			
In our County Maternal Health Program								
				1	2	3	4	5
c)	The maternal health TWG/ committee at the county does not meet regularly							
d)	I'm not confident with the county M&E stakeholders management plans & practices							
e)	We receive M&E mentorship from the national MoH M&E teams							
f)	Key internal and external stakeholders involved in the program are always identified							
g)	Identifying and securing sources of sustainable funding does not happen through a consultative process for key stakeholders							
h)	There's maternal health participatory planning and decision making through a consensus building process at the county.							
i)	The most important M&E questions the program will investigate are identified by program managers or M&E specialists with input from all stakeholders.							
j)	Contributions of stakeholders (both negative and positive) and their impact on how information has been used for decision making are documented.							
k)	Mechanisms and communication channels to facilitate exchange of information on M&E among stakeholders exist.							
l)	There is strong coordination of stakeholders and partnerships							
m)	A stakeholder engagement and communication plan showing the roles of each stakeholder exists.							
n)	The synergy and close working relationship between the county M&E unit and or the county health M&E unit is weak and needs to be improved.							
o)	National M&E system information products (reports, website, newsletters and charts) are useful.							

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
	1	2	3	4	5
p)	International development partners actively participate in county maternal health matters.				
q)	County maternal health program sought the opinion of county government officials, donors, CBOs, civil society and CHVs.				
r)	An updated inventory of stakeholders for county maternal health M&E does not exist.				
s)	County health directors and managers are interested and support M&E activities in our department.				
t)	We rely on donors to support site visits to monitor, verify data reported, and supervise health facilities.				
u)	Public participation happens in maternal health planning and decision making.				
v)	Community health workers are involved in maternal health planning and decision making.				
w)	Traditional birth attendants are not involved in maternal health planning and decision making.				
x)	There are well developed mechanisms e.g. feedback reports, newsletters to communicate about maternal health M&E activities and decisions to the community.				
y)	Community health workers and our maternal program is working seamlessly				

SECTION F: CAPACITY BUILDING FOR M&E

11) What is your level of agreement with the following statements on Capacity building for M&E on performance of maternal health programmes in Kenya?

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
	1	2	3	4	5
a)	Human resources for maintaining and updating the county maternal health databases are adequate.				
b)	I'm not familiar with the county integrated monitoring & evaluation guidelines.				
c)	Staff involved in M&E have skills and competencies needed to fulfill the county maternal health programs M&E mandate				
d)	A maternal health research and evaluation agenda exists that directs research and evaluation activities.				
e)	Health facility surveys at maternal health related service delivery points are conducted regularly				
f)	Human capacity for M&E is usually enhanced through on job training, mentorship & coaching.				
g)	M&E staff do not attend M&E conferences, workshops, team building activities regularly.				
h)	There's a county endorsed M&E training curriculum appropriate for personnel at county maternal health program.				
i)	There are no plans for ensuring that new skills and staff are utilized effectively.				
j)	M&E human capacity is built through colleges and technical schools within the county.				
k)	There is county maternal health M&E capacity building plan to address capacity gaps in our department.				
l)	There is overreliance on external stakeholders like NGOs and donors to handle M&E activities				
m)	Resources – human, financial, material – are committed to implement the M&E work plan				
n)	There's a county database of trainers and other technical service providers capable of building M&E capacity.				

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
o)	M&E personnel do not have opportunities for lateral and vertical career moves within the county.				
p)	IT equipment and supplies are available for maintaining the county maternal health databases.				
q)	IT capacity for our department is enough and effective.				
r)	We do not have enough computers to work with				
s)	We do not have internet connectivity on our work computers				
t)	Maternal health M&E related skills and competencies of the M&E staff are assessed regularly				
u)	The gaps in terms of M&E skills and competencies of county M&E staff are identified and incorporated in the capacity building plan.				
v)	M&E needs assessment has been conducted.				
w)	In our maternal health program, we seek feedback from our clients regularly				
x)	The maternal health M&E capacity building offered is coordinated to avoid duplication.				

SECTION E: DATA MANAGEMENT FOR M&E

12) What is your level of agreement with the following statements on Data Management for M&E on performance of maternal health programmes in Kenya?

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
a)	The maternal health targets and indicators under UN sustainable development goals (SDGs) are monitored and tracked regularly.				
b)	Baseline assessments are conducted before any maternal health projects are implemented.				

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
	1	2	3	4	5
c)	Performance indicators are identified annually and measured.				
d)	We do not rely on data for planning and setting maternal health targets.				
e)	Needs assessments are conducted before any maternal health project is started.				
f)	There are enough data collection teams.				
g)	Guidelines exist for recording, collecting, collating, and reporting maternal health data.				
h)	There is an M&E electronic software for efficient M&E data management.				
i)	Data collection, analysis and use is a culture in our maternal health program				
j)	There are no standard tools for maternal health data collection.				
k)	Data is stored in multiple methods and places to ensure there is always a copy available in case one type or location is lost or destroyed.				
l)	There are no adequate equipment & software for data, analysis, presentation and data storage.				
m)	There are adequate skills in data analysis in our department.				
n)	Patient data privacy is not a big concern and is not taken seriously.				
o)	There is no functional database for capturing and storing maternal health services data.				
p)	Data is stored in multiple methods and places to ensure there is always a copy available in case one type or location is lost or destroyed.				

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
	1	2	3	4	5
q)	M&E findings are reported to donors, stakeholders and internal staff members to ensure project improvement, transparency and data-driven decision making.				
r)	Display of data for monitoring their set targets on charts and graphs happens.				
s)	Critical review, which encourages the use of data for learning, performance improvement, and decision-making exists.				
t)	We do not share data and information with the national maternal health program.				
u)	Information products e.g. newsletters, reports etc. are regularly sent to a wide variety of stakeholders.				
v)	Decisions are based on evidence/facts, data and health information.				
w)	There are procedures for data sharing with the national M&E system and international donors and agencies.				
x)	There are no guidelines to support the analysis, presentation and use of data at the facility (e.g. graphs on walls showing cumulative coverage)				
y)	We do not use health information system data to make decisions.				
z)	Evidence from the various MCH programs in the county is used to influence policy.				

SECTION G: CONTEXTUAL DETERMINANTS

13) What is your level of agreement with the following statements on contextual determinants on performance of maternal health programmes in Kenyan County Governments?

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
a)	Employees and beneficiaries easily access section heads				
b)	Our organizational structure supports M&E system.				
c)	Supervisors are not empowered to make decisions at their level.				
d)	There is an organogram with clearly defined roles and responsibilities.				
e)	The entire management team is highly effective.				
f)	Corruption is regularly practiced in our department.				
g)	This department is very supportive of and adaptable to change.				
h)	We do not have a list of core values.				
i)	Either gossip, rumors, ridicule, harassment, bullying, indifference, lack of support, cliques or 'in' groups, is practiced in our department.				
j)	Ethical behavior such as respect for rules and procedures, sanctioning of unethical behaviors, pride in work is practiced.				
k)	Political interference, lack of political goodwill affects implementation of M&E practices.				
l)	There is no legal framework at the county level that mandates M&E for county projects.				
m)	There's no clarity on who is to carry out M&E- confusion on oversight and M&E and who should do what.				
n)	M&E is an audit tool to audit mismanagement and poor performance.				
o)	There is no goodwill by county administration on implementation of county integrated M&E system (CIMES).				
p)	There is a clearly defined structure for communication				

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
q)	Communicating decisions is efficient in our maternal health program.				
r)	Feedback is always received from communications made.				
s)	We hold departmental meetings at least every month.				
t)	Communication channels are very open here among management and workers.				
u)	Our county maternal health program doesn't have a clear strategic plan.				
v)	I am not familiar with the organizational vision & mission.				
w)	We are well aligned with the united nations SDGS, MoH Kenya, and county maternal health goals.				
x)	Everyone here is clear on what drives our success as a department.				
y)	Our department assesses its strengths, weaknesses, opportunities, and threats in order to understand the current operating climate.				

SECTION H: BEHAVIORAL DETERMINANTS

14) What is your level of agreement with the following statements on behavioral determinants on performance of maternal health programmes in Kenyan County Governments?

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
a)	I do not understand M&E concepts properly				
b)	M&E staff have the necessary skills and competencies				
c)	Staff here lack the interpersonal and technical skills needed to work effectively				

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
d)					
e)					
f)					
g)					
h)					
i)					
j)					
k)					
l)					
m)					
n)					
o)					
p)					
q)					
r)					
s)					

KEY	1- Strongly Disagree	2- Disagree	3- Undecided	4- Agree	5- Strongly Agree
In our County Maternal Health Program					
t)	I'm highly likely to recommend someone to this organization				
u)	Changes suggested by employees are not usually implemented.				
v)	My supervisor is not open to constructive criticism.				
w)	There is sufficient support from top management in our department.				
x)	Management sought input from employees on major decisions.				
y)	Adapting to change is easy in our county maternal health program.				

Thank you for your participation

...ENDS...

Appendix VI: Interview Guide For; Medical superintendents, Hospital administrators, Nursing services managers, MCH in charge, CHMT members, County governors, County Executive Members for Health, County Chief Officers for Health, County delivery unit members, Maternal health NGOs and National MoH officers.

The purpose for this interview is to collect information on the influence of monitoring and evaluation practices, contextual and behavioral determinants and performance of county maternal health programs: a case of county governments in Kenya. The information collected will be used for academic purposes only and it is expected that the findings from this study will make a significant contribution towards enhancing service delivery in maternal health programs in Kenya. The information collected will be handled with confidentiality and with academic professionalism. Kindly assist with the interview.

County Name:	
Title of Respondent	
Gender	
Role	
Date Interviewed:	
Time interview ended:	
Name of interviewer:	

DEMOGRAPHIC INFORMATION

- 1) Highest Level of Education
- 2) How long have you worked in this department?
- 3) How long have you worked with maternal health programs in Kenya?

PLANNING FOR M&E

What are your plans for Monitoring and Evaluation at the county and specifically in maternal health?

Do you know about the county integrated monitoring and evaluation system (CIMES) guidelines?

What is the county Monitoring and Evaluation policy?

How are resource allocated for Monitoring and Evaluation?

How are resource mobilized for Monitoring and Evaluation activities?

Is there a budgeting for Monitoring and Evaluation activities?

Do you prepare M&E work plans and M&E frameworks?.

Is Monitoring and Evaluation included in the strategic planning process? Explain

Are needs assessment, feasibility studies and baseline studies carried out before implementation of programs? Describe.

STAKEHOLDERS ENGAGEMENT IN M&E

Are there advocacy activities to promote Monitoring and Evaluation at the county?

Please name them.

How are stakeholders identified at the county, specifically those involved in maternal health?

How do you analyze and allocate roles and responsibilities for the various stakeholders

How is stakeholder communication on matters of maternal health at the county conducted?

What collaborations exist with county, national and international stakeholders in maternal health?

Are there specific persons responsible for managing stakeholders, partners and collaborators in maternal health issues?

Do you involve the community when planning for maternal health issues? How are they involved and at what level?

CAPACITY BUILDING FOR M&E

What is the level of technical expertise for your monitoring and evaluation staff?

How often is training for monitoring and evaluation conducted?

What is the plan for monitoring and evaluation workforce development?

Are there monitoring and evaluation champions at the county

What is the level of IT knowledge and usage at the county?

What capacity building activities are conducted in support of M&E at the county health maternal programs?

DATA MANAGEMENT FOR M&E

How often is maternal health data collected, how is it collected?

How is maternal health data analyzed and displayed?

How is data disseminated to various stakeholders?

Do you use data and information gathered to make maternal health decisions?

What challenges do you face in the implementation of M&E at the county maternal health programs?

What recommendations would you give towards implementation of M&E for county maternal health programs?

DETERMINANTS

How does the organizational structure play part in the implementation of M&E system in this county?

How does the organizational culture play part in the implementation of M&E system in this county?

What is the communications structure and how does it play part in the implementation of M&E in this county?

How does human resources availability or lack of play part in the implementation of M&E in this county?

How does politics influence implementation of M&E in this county? Is there political goodwill?

What are your comments on the following with regard to the maternal health programs at this county?

Any other comments related to barriers or opportunities for improving performance of maternal health programs in this county?

THANK YOU

Appendix VII: Observation Guide

Please use visual observations on the sampled buildings for predetermined features as per the Likert guide scale schedule tabulated here below; where 5=Strongly agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly disagree

No	Observation features	1	2	3	4	5
1.	There is good coordination of activities in County Maternal Health Programmes					
2.	The clients are happy with the services offered					
3.	All staff are enthusiastic about their work					
4.	There is good record keeping for the programme					
5.	The vision and mission were clearly stated					
6.	The staff were polite and welcoming					
7.	The facilities were in good shape and functional					
8.	There were staff vehicles that are operational					
9.	There were beneficiaries of the programmes un attended to					
10	There was a customer service desk					
11	Presence of documents indicating procurement in County Maternal Health Programmes					
12	The building floors and wall were not in level					
13	some of the operations were computerized					
14	The building environment was untidy and had stagnant water					
15	There was a suggestion box for all County Maternal Health Programmes					
16	There were leaflets given indicating the mission and vision of the County Maternal Health Programmes					

Appendix VIII: List of Sampled health facilities

Name	Keph level	Facility type	Beds	County	Constituency	Sub county	Ward
Gatundu District Hospital	Level 4	Primary care hospitals	188	Kiambu	Gatundu South	Gatundu South	Ngenda
Igegania Sub-District Hospital	Level 4	Primary care hospitals	82	Kiambu	Gatundu North	Gatundu North	Mang'u
Nyathuna Level 4 Hospital	Level 4	Primary care hospitals	10	Kiambu	Kabete	Kabete	Nyadhuna
Kiambu County Referral Hospital	Level 5	Secondary care hospitals	361	Kiambu	Kiambu	Kiambu Town	Township
Karuri Level 4 Hospital	Level 4	Primary care hospitals	18	Kiambu	Kiambaa	Kiambaa	Karuri
Tigoni District Hospital	Level 4	Primary care hospitals	64	Kiambu	Limuru	Limuru	Ngecha Tigoni
Thika Level 5 Hospital	Level 5	Secondary care hospitals	265	Kiambu	Thika Town	Thika Town	Township
Nyakach County Hospital	Level 4	Primary care hospitals	20	Kisumu	Nyakach	Nyakach	Central Nyakach
Chulaimbo County Hospital	Level 4	Primary care hospitals	26	Kisumu	Kisumu West	Kisumu West	North West Kisumu
Ahero County Hospital	Level 4	Primary care hospitals	30	Kisumu	Nyando	Nyando	Ahero
Muhoroni County Hospital	Level 4	Primary care hospitals	32	Kisumu	Muhoroni	Muhoroni	Muhoroni Koru
Kombewa County Referral Hospital	Level 4	Primary care hospitals	60	Kisumu	Seme	Seme	Central Seme
Kisumu County Hospital	Level 4	Primary care hospitals	180	Kisumu	Kisumu Central	Kisumu Central	Market Milimani
Jaramogi Oginga Odinga Teaching & Referral Hospital	Level 5	Secondary care hospitals	457	Kisumu	Kisumu Central	Kisumu Central	Kondele
Gilgil County Hospital	Level 4	Primary care hospitals	211	Nakuru	Gilgil	Gilgil	Gilgil
Langa Langa Hospital	Level 4	Primary care hospitals	44	Nakuru	Nakuru Town East	Nakuru East	Flamingo
Molo District Hospital	Level 4	Primary care hospitals	57	Nakuru	Molo	Molo	Molo
Annex Hospital (Nakuru)	Level 4	Primary care hospitals	60	Nakuru	Nakuru Town East	Nakuru West	London

Bahati District Hospital	Level 4	Primary care hospitals	65	Nakuru	Bahati	Nakuru North	Bahati
Naivasha District Hospital	Level 4	Primary care hospitals	143	Nakuru	Naivasha	Naivasha	Viwandani
Nakuru Provincial General Hospital	Level 5	Secondary care hospitals	588	Nakuru	Nakuru Town East	Nakuru West	London
Kenyatta National Hospital	Level 6	Comprehensive Teaching & Tertiary Referral Hospital	1455	Nairobi	Kibra	Kibra	Woodley/Kenyatta Golf Course
Mama Lucy Kibaki Hospital - Embakasi	Level 4	Primary care hospitals	112	Nairobi	Embakasi West	Embakasi West	Umoja II
Mbagathi District Hospital	Level 4	Primary care hospitals	200	Nairobi	Kibra	Kibra	Woodley/Kenyatta Golf Course
Pumwani Maternity Hospital	Level 4	Primary care hospitals	350	Nairobi	Kamukunji	Kamukunji	Pumwani
Mathari Hospital	Level 6	Specialized & Tertiary Referral hospitals	700	Nairobi	Mathare	Mathare	Hospital
National Spinal Injury Hospital	Level 6	Specialized & Tertiary Referral hospitals	30	Nairobi	Dagoretti North	Dagoretti North	Kilimani
Kangundo County Hospital	Level 4	Primary care hospitals	156	Machakos	Kangundo	Kangundo	Kangundo Central
Kathiani Sub County Hospital	Level 4	Primary care hospitals	188	Machakos	Kathiani	Kathiani	Kathiani Central
Matuu District Hospital	Level 4	Primary care hospitals	40	Machakos	Yatta	Yatta	Matuu
Machakos County Referral Hospital	Level 5	Secondary care hospitals	450	Machakos	Machakos Town	Machakos	Machakos Central
Kajiado County Referral Hospital	Level 4	Primary care hospitals	138	Kajiado	Kajiado Central	Kajiado Central	Ildamat
Kitengela sub-county hospital	Level 4	Primary care hospitals	20	Kajiado	Kajiado East	Kajiado East	Oloosirkon/Sholinko
Loitokitok Sub County Hospital	Level 4	Primary care hospitals	75	Kajiado	Kajiado South	Loitokitok	Kuku

Ngong Sub-County Hospital	Level 4	Primary care hospitals	25	Kajiado	Kajiado North	Kajiado North	Ngong
Ifo 2 Hospital	Level 4	Primary care hospitals	30	Garissa	Daadab	Dadaab	Dadaab
Ijara Sub County Hospital - Masalani	Level 4	Primary care hospitals	62	Garissa	Ijara	Ijara	Masalani
Dadaab Sub-County Hospital	Level 4	Primary care hospitals	25	Garissa	Daadab	Dadaab	Dadaab
Bura District Hospital	Level 4	Primary care hospitals	30	Garissa	Fafi	Fafi	Bura
Garissa County Referral Hospital	Level 5	Secondary care hospitals	224	Garissa	Garissa Township	Garissa	Waberi
Moi Teaching Refferal Hospital	Level 6	Comprehensive Teaching & Tertiary Referral Hospital	819	Uasin Gishu	Ainabkoi	Ainabkoi	Kapsoya
Turbo Sub County Hospital	Level 4	Primary care hospitals	18	Uasin Gishu	Turbo	Turbo	Tapsagoi
Uasin Gishu District Hospital	Level 4	Primary care hospitals	8	Uasin Gishu	Moiben	Moiben	Kimumu
Ziwa Sub County Hospital	Level 4	Primary care hospitals	20	Uasin Gishu	Soy	Soy	Ziwa
Burnt Forest Sub County Hospital	Level 4	Primary care hospitals	16	Uasin Gishu	Ainabkoi	Ainabkoi	Ainabkoi/Olare
Londiani District Hospital	Level 4	Primary care hospitals	50	Kericho	Kipkelion East	Kipkelion East	Kedowa/Kimugul
Kericho District Hospital	Level 4	Primary care hospitals	250	Kericho	Ainamoi	Ainamoi	Kipchebor
Sigowet Sub-District Hospital	Level 4	Primary care hospitals	90	Kericho	Sigowet/Soin	Sigowet/Soin	Sigowet
Kapkatet District Hospital	Level 4	Primary care hospitals	227	Kericho	Bureti	Bureti	Kapkatet
Webuye Hospital	Level 4	Primary care hospitals	187	Bungoma	Webute West	Webuye West	Matulo
Bumula Sub County Hospital	Level 4	Primary care hospitals	51	Bungoma	Bumula	Bumula	Bumula
Bungoma County Referral Hospital	Level 4	Primary care hospitals	223	Bungoma	Kanduyi	Kanduyi	Township

Kimilili Subcounty Hospital	Level 4	Primary care hospitals	78	Bungoma	Kimilili	Kimilili	Kibingei
Mariakani District Hospital	Level 4	Primary care hospitals	72	Kilifi	Kaloleni	Kaloleni	Mariakani
Kilifi County Hospital	Level 4	Primary care hospitals	172	Kilifi	Kilifi North	Kilifi North	Sokoni
Malindi District Hospital	Level 4	Primary care hospitals	183	Kilifi	Malindi	Malindi	Shella

Appendix IX: Validity and Reliability Analysis Test Results

VALIDITY ANALYSIS

Component Matrix

	Component															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
In our County Maternal Health Program complaints are constructively handled	.567	.260	.497	.328	.180	.045	.105	.083	.220	.107	.279	.077	.019	.058	.226	.056
Staff in our County Maternal Health Program are flexible to meet customer needs and ensure full Antenatal care coverage	.097	.226	.123	.062	.430	.019	.303	.096	.198	.149	.312	.169	.535	.261	.073	.136
Our County Maternal Health Program always achieves the targets set out in the County Integrated Development Plan (CIPD).	.549	.479	.036	.232	.051	.281	.122	.273	.099	.038	.355	.271	.042	.170	.014	.030
Staff in our County Maternal Health Program performs the activities and obtain the products in the timelines established	.447	.012	.058	.125	.512	.012	.105	.432	.175	.304	.174	.071	.274	.046	.019	.194
The county works closely with the national M&E team to reduce maternal mortality ratio.	.022	.408	.451	.220	.045	.087	.046	.588	.134	.071	.151	.081	.017	.186	.038	.236
Staffs in County Maternal Health Program have enhanced the Proportion of fully immunized population of children under one year	.050	.643	.148	.092	.493	.039	.066	.400	.188	.010	.172	.043	.002	.041	.151	.004
Mothers are given advices on the benefits of exclusive breastfeeding for the first six months	.675	.221	.101	.274	.356	.092	.368	.099	.004	.298	.015	.068	.082	.069	.114	.009
The County Maternal Health Program have increased the percentage of births assisted by qualified health staff	.418	.375	.357	.032	.223	.053	.095	.216	.075	.470	.165	.325	.111	.137	.014	.078

There is an increase in Proportion of demand .033 .161 .139 .217 .077 **.795** .003 .395 .061 .098 .087 .078 .023 .049 .267 .095
for family planning services in our health
facilities

The number of children under five who are .251 .097 .320 **.737** .085 .203 .069 .249 .338 .021 .111 .109 .067 .096 .085 .008
stunted have drastically reduced over the years

Employees in our County Maternal Health .090 .095 .105 .007 .023 .294 .139 .111 **.894** .099 .156 .027 .064 .014 .052 .103
Program feel that managers value their
feedback

Staff make sure that mothers and babies .199 .128 .036 .154 .052 .104 .283 .253 .292 .081 .030 **.776** .220 .021 .083 .071
receive postnatal care within two days of birth

Our County Maternal Health Program budget **.737** .475 .320 .178 .216 .070 .052 .095 .035 .075 .008 .025 .016 .143 .038 .043
has the same priorities of reducing Maternal
mortality rate as our county's development plan

There is effective task scheduling in our .048 .288 .100 .139 .573 .275 .110 .065 .090 **.630** .058 .028 .063 .082 .175 .106
County Maternal Health Program for enhancing
the percentage of mothers receiving complete 4
courses of ANC services

Our County Maternal Health Program sends .005 .227 .019 .406 .008 .061 .141 .251 .008 .058 .132 .361 .363 .146 **.618** .082
reports on time

Our County Maternal Health Program **.653** .071 .089 .261 .318 .374 .287 .003 .111 .348 .085 .072 .052 .015 .116 .003
management ensures that the resources
allocated for M&E are adequate

There is adequate allocations of resources for .223 .023 .188 .120 .190 .193 **.772** .016 .025 .064 .111 .255 .100 .020 .339 .041
trainings in M&E for the County Maternal
Health program

The management of County Maternal Health .094 .534 .076 .093 **.628** .082 .002 .007 .414 .038 .060 .155 .101 .098 .261 .004
Programs ensures purchase of M&E reference
materials.

The program officer writes up grant **.591** .351 .163 .552 .098 .036 .231 .126 .000 .045 .260 .030 .134 .081 .138 .005
applications addressed to institutional donors
for funding on time

The County Maternal Health program officers .319 .285 .185 .205 .363 .155 .017 .018 .309 **.562** .277 .005 .032 .141 .199 .002
communicates effectively with the public and
develops a funding network with enthusiastic
and committed supporters

There are organized fund drives by the County .346 .315 .108 .171 .302 .171 .186 .110 **.427** .236 .350 .380 .047 .049 .015 .050
Maternal Health program officers for
supporting the planning for M&E

Budget allocation influence effective planning **.565** .244 .498 .121 .264 .222 .137 .057 .032 .165 .034 .250 .221 .079 .082 .004
for County Maternal Health programmes M&E

The project budget provides a clear and **.737** .139 .279 .184 .324 .346 .007 .181 .105 .138 .074 .143 .008 .034 .099 .034
adequate provision for M&E

M&E frameworks ensures effectiveness and **.599** .072 .201 .012 .013 **.616** .103 .284 .158 .128 .047 .097 .154 .102 .141 .012
efficiency in utilization of resources in
planning for M&E.

M&E Frameworks are critical communication **.751** .140 .367 .051 .211 .062 .045 .101 .243 .004 .210 .233 .201 .113 .063 .063
tools in relation to planning for M&E.

M&E policy enhances the budget decision- **.703** .099 .094 .016 .185 .124 .060 .305 .012 .410 .386 .031 .084 .036 .097 .054
making and management of planning for M&E
of County Maternal Health programmes

M&E policy ensures regular reporting on **.353** .287 .085 **.756** .051 .085 .064 .158 .286 .054 .064 .105 .248 .086 .045 .038
implementation progress of County Maternal
Health programmes

Strategic planning in support of M&E provides **.106** .154 .422 .167 .115 .037 .194 .046 .243 .031 .028 **.724** .268 .183 .062 .014
management of County Maternal Health
programmes with information to facilitate
programmes execution

Strategic planning in support of M&E serves as **.759** .234 .014 .162 .321 .008 .126 .073 .158 .365 .044 .182 .053 .084 .014 .090
a basis for accountability and learning by staff
and management of County Maternal Health
programmes

Strategic planning in support of M&E gives technical assistance for strengthen planning for M&E .228 .206 .167 .067 .139 .124 .269 .368 .039 **.762** .034 .121 .043 .078 .106 .067

Advocacy to promote M&E helps donors understand the complexity of policy change and manage expectations in M&E .081 .336 .125 .571 .038 .204 .058 .102 .106 .110 .083 .164 **.636** .098 .047 .075

Engaging all the stakeholders in planning an advocacy strategy ensures a shared understanding of the M&E achievement. **.843** .127 .121 .036 .193 .186 .121 .328 .032 .085 .178 .032 .002 .083 .074 .060

Different perceptions of stakeholders affects the advocacy strategies to promote M&E .047 .021 .115 .230 .279 .150 .102 .301 .068 **.674** .218 .169 .296 .291 .065 .077

The impact and influence of the stakeholders on M&E is considered in identification of stakeholders .426 .259 .407 .042 **.432** .129 .110 .073 .296 .031 .158 .329 .114 .171 .215 .179

The stakeholder identification involves collaboration between management and beneficiaries of the County Maternal Health programmes **.624** .153 .338 .012 .064 .254 .119 .110 .099 .332 .225 .298 .262 .107 .047 .102

The stage of M&E helps in identification and selection of the right stakeholders for County Maternal Health programmes .155 .098 .110 .312 .181 .112 .055 .068 .307 **.588** .199 .359 .322 .126 .067 .184

Stakeholder analysis helps in determining how the key stakeholders are included in the program .270 .003 .044 .015 .183 .511 .161 .146 .016 .181 .051 .209 **.688** .109 .089 .029

There is an assessment of the influence, importance and level of impact of various stakeholder in M&E **.786** .047 .039 .091 .064 .191 .051 .080 .247 .364 .181 .033 .045 .247 .038 .042

There are efficient communication strategies that ensures linkages between the stakeholders, the M&E team and program implementers .211 .361 .398 .118 .034 **.707** .218 .132 .106 .069 .242 .000 .060 .078 .003 .008

Through communication the progress and the challenges facing the M&E process are communicated and addressed .145 .063 .283 .074 .371 .350 .220 .284 .231 .086 **.568** .040 .213 .204 .005 .117

Collaborations amongst the different stakeholders greatly impacts the M&E process .328 .412 .054 .104 .248 .193 .255 .267 .118 .041 .231 **.599** .069 .035 .177 .034

Partnerships increases the participation of the stakeholders in M&E of the County Maternal Health programmes **.655** .164 .267 .140 .203 .052 .434 .065 .342 .012 .164 .054 .129 .176 .144 .018

The community participates in M&E design, planning and decision making for the County Maternal Health programmes .214 .128 .024 .325 .141 .036 **.800** .084 .015 .203 .148 .067 .250 .048 .127 .027

The community participates in reporting of results of M&E for the programme. .125 .210 **.803** .069 .173 .228 .270 .027 .235 .023 .115 .065 .097 .207 .043 .081

Community participates in identifying the measurements to show extent of progress achieved in the County Maternal Health programmes. **.710** .237 .292 .139 .108 .034 .178 .143 .010 .244 .100 .249 .220 .131 .262 .058

The program managers identifies skilled personnel to carry out the monitoring and evaluation functions .035 .663 .224 .222 .084 .018 .018 .206 .180 **.588** .075 .035 .089 .103 .006 .067

The programmes officers ensure that the M&E staff have adequate comprehension to rely on information provided by M&E **.677** .016 .343 .236 .057 .203 .005 .299 .246 .116 .227 .217 .228 .009 .029

Project training need analysis is done to ensure the right skills are acquired to manage the M&E activities for County Maternal Health programmes .057 .090 .011 .476 .056 .231 .026 .130 .241 .102 .164 .127 .255 .132 .092 **.692**

Training equips the stakeholders with the necessary skills to conduct M&E for the programmes .164 .127 .318 **.808** .022 .222 .013 .091 .012 .001 .047 .296 .174 .050 .116 .088

Supervision is essential in enhancing the implementation of M&E in County Maternal Health programmes .096 .201 .280 .071 .194 .134 .229 .040 .002 .047 .001 .207 .067 **.805** .238 .031

Training and supervision ensures that the M&E staff understands their roles and responsibilities in M&E process. **.657** .379 .295 .044 .008 .158 .322 .120 .049 .218 .251 .052 .060 .239 .077 .058

There is M&E Workforce Development Plan in County Maternal Health programmes which ensures that resources are used judiciously in fulfilling the goals of the project. .299 .240 .374 .048 .333 .337 .132 .209 .006 .071 **.601** .138 .033 .149 .060 .043

In County Maternal Health programmes, M&E Workforce Development Plan is used to help ensure the M&E staff with the most appropriate skill sets are assigned to tasks within the project .115 .404 **.670** .274 .237 .152 .218 .171 .035 .156 .201 .051 .101 .221 .104 .015

In there is an M&E plan for County Maternal Health programmes to avoid confusion and conflicts among the M&E team members .320 .071 .043 .062 .038 .012 **.777** .316 .227 .002 .206 .086 .088 .224 .079 .084

M&E Champions promotes quality and consistency in M&E practice for the programme .005 .204 .240 .047 .079 .107 .149 .138 .325 .165 .377 .196 .008 .071 **.715** .060

M&E Champions develops an organizational culture that supports the use of M&E data in enhancing the programme performance .134 .348 .234 .141 .029 .326 .038 **.698** .161 .170 .141 .210 .020 .261 .016 .027

M&E Champions helps build adequate capacity in specific competencies for the programme M&E **.644** .078 .529 .146 .353 .034 .042 .237 .139 .005 .205 .132 .082 .019 .017 .089

The County Maternal Health programmes have a surveillance system which assures that M&E systems are operating effectively .308 .035 .101 .143 .256 .345 .209 .187 .273 .043 **.643** .273 .170 .040 .085 .081

The surveillance system allows the M&E staff to assess the usefulness of County Maternal Health programmes and also assess how M&E initiatives helps them achieve its goals and objectives .066 .172 .249 .126 .075 **.700** .374 .074 .051 .069 .189 .088 .200 .370 .000 .093

IT capacity of the M&E staff for the programme affects their involvement in some stages of M&E which needs IT **.832** .129 .239 .015 .138 .068 .307 .156 .092 .082 .062 .021 .198 .054 .003 .162

Routine data collection for the programme allows M&E implementers to gather qualitative data within a short period .016 .135 .073 .346 .034 .376 .097 .074 .323 .222 .114 .006 **.705** .180 .032 .029

The County Maternal Health programmes have M&E staff responsible for routine data collection .166 .080 .011 .458 .103 .188 .289 .076 .173 **.715** .169 .056 .070 .130 .135 .052

The routine data collection facilitates the decision making process in County Maternal Health programmes .594 .030 .171 .171 .172 .040 **.630** .026 .029 .046 .242 .151 .011 .004 .034 .085

The County Maternal Health programmes M&E systems produce data that is complete and accurate **.713** .327 .006 .031 .305 .082 .085 .086 .131 .102 .050 .149 .051 .238 .092 .082

Data analysis and auditing facilitates the evaluation of data quality at health facilities, as a part of routine supervisory visits. .464 .285 .096 .260 .232 .031 .117 .079 **.627** .031 .026 .121 .022 .041 .218 .117

M&E data analysis helps in pointing out the areas of concern in the County Maternal Health programmes .476 .070 .126 **.608** .073 .047 .166 .275 .112 .273 .011 .090 .086 .084 .074 .183

Data analysis for the County Maternal Health programmes makes it possible to make the right decisions in M&E .127 .115 .095 .005 .278 .230 .353 .002 .247 .192 .323 .110 **.602** .173 .117 .038

Data auditing helps the stakeholders to understand every stage of M&E process for the programme **.581** .440 .097 .179 .160 .073 .221 .416 .062 .145 .265 .039 .041 .234 .136 .031

The data dissemination is done through the relevant programme stakeholders to support the M&E systems .060 .092 .194 .375 .113 .366 .224 .128 .010 .230 .170 **.689** .041 .122 .111 .086

The dissemination of M&E is mostly done during the M&E sessions **.593** .448 .244 .121 .379 .145 .179 .130 .329 .028 .063 .185 .002 .043 .049 .049

The program officers facilitates the M&E data dissemination .045 .082 .194 .604 .025 .031 **.670** .201 .253 .074 .082 .054 .121 .019 .016 .025

The M&E data dissemination for the programme is timely and efficiently done to give room for decision making process .002 **.718** .340 .012 .140 .348 .386 .075 .016 .003 .107 .046 .181 .125 .044 .077

The challenges faced during the M&E process are identified through the collected data .049 .232 .466 .023 .153 .193 .225 .096 .065 .245 .198 .256 .058 .054 .180 **.628**

The M&E data is used in County Maternal Health programmes to decide which stages need adjustments .038 .111 .133 .001 .349 .121 .393 .419 .186 .234 .127 .025 **.619** .029 .077 .023

The M&E data points out the challenges facing every stage of M&E process hence coming up with solutions to enhance the programme **.744** .244 .147 .263 .048 .276 .154 .092 .304 .100 .128 .189 .052 .142 .058 .037

There is a defined structure for communication in the County Maternal Health Program .261 .281 .136 .242 .243 .391 .187 **.624** .170 .168 .089 .003 .077 .195 .119 .070

Employees and beneficiaries of the programmes easily access section heads in the County Maternal Health Program .049 .375 **.707** .157 .092 .073 .232 .100 .329 .117 .144 .005 .254 .122 .122 .128

Organizational structure in our County Maternal Health Program does not support M&E system .117 .056 .273 **.589** .111 .520 .087 .069 .283 .239 .148 .015 .114 .256 .165 .009

Our County Maternal Health Program does not encourage micromanagement of staff .261 .391 **.502** .100 .322 .086 .299 .203 .003 .245 .080 .338 .258 .056 .124 .054

Team work is always exercised in our County Maternal Health Program .047 .172 .432 .073 .414 .075 .128 .143 .269 .112 .129 .066 .164 .119 **.642** .032

Our County Maternal Health Program has a clear strategic plan .575 **.595** .076 .128 .340 .184 .021 .262 .200 .061 .059 .090 .019 .038 .093 .079

Performance of maternal health programmes is linked to time Computational Complexity .025 .185 .101 .455 .064 .019 .017 .189 .033 .431 .236 .064 .211 **.631** .078 .082

Information-Based Complexity greatly affect performance of maternal health programmes **.692** .209 .148 .165 .231 .032 .413 .295 .157 .202 .060 .039 .063 .147 .122 .021

There is a clear and effective communication process in our County Maternal Health Program **.639** .141 .028 .131 .105 .089 .193 .167 .217 .002

Communicating decisions is efficient in our County Maternal Health Program **.787** .129 .022 .261 .220 .259 .227 .093 .070 .108 .254 .120 .057 .107 .072 .050

Feedback is always received from communications made in our County Maternal Health Program .028 .379 .192 .147 .174 .080 .141 .259 .145 .186 .119 .249 .223 .072 **.578** .325

There is shortage of essential supplies and equipment for County Maternal Health Program in most facilities **.503** .007 .386 .233 .085 .295 .026 .182 .328 .266

There is inadequate staffing for County Maternal Health Program in our health facilities **.473** .018 .171 .156 .347 .148 .173 .035 .092 .078 .004 .240

Financial capacity is inadequate to regularly train our staff to upgrade in our medical standards **.590** .020 .036 .011 .127 .130 .033 .204 .187

There is an agile organization strategy in our facilities spearheaded by the management to ensure success of the County Maternal Health Program **.633** .074 .234 .132 .098

Staff have a positive attitude towards emerging opportunities in County Maternal Health Program **.623** .143 .168 .112 .015 .258 .419 .055 .047 .161

In our County Maternal Health Program employees have good attitudes towards work **.599** .221 .186 .426 .348 .054 .225 .159 .119 .027 .155 .022 .128 .175 .071 .265

Staff in our County Maternal Health Program have high morale to elevate the moods of their teams and even their supervisors **.668** .151 .000 .232 .035 .282 .159

Staff in our County Maternal Health Program .359 .220 **.682** .070 .004 .223 .058 .173 .291 .109 .280 .076 .077 .022 .221 .100
have skills in understanding M&E frameworks

Staff in our County Maternal Health Program .248 .144 .330 .092 .038 .038 **.810** .016 .142 .097 .063 .114 .134 .031 .251 .037
are involved in identifying and developing
performance indicators

Staff in our County Maternal Health Program .084 .078 .342 .069 **.763** .002 .139 .361 .070 .044 .053 .024 .183 .189 .007 .122
are always involved in undertaking quarterly
reports

Our County Maternal Health Program provide .022 .318 .131 .387 .242 .050 .038 .089 .004 .000 .038 **.776** .160 .048 .026 .132
all stakeholders and the public with appropriate
information so that they can understand the
process

Our County Maternal Health Program uses .006 .198 .114 .122 .297 .303 .020 .290 .156 .300 .153 .079 .139 .202 **.663** .130
stakeholder's framework to identify the needs
to analyze the different levels of the issues that
occur in the programme

Our County Maternal Health Program provide .334 .178 .318 .020 .211 .241 .150 **.613** .061 .211 .180 .065 .210 .157 .256 .180
multiple rounds opportunities to stakeholders
for revising individual views in response to
group trends

Our County Maternal Health Program balances **.675** .343 .200 .160 .073 .127 .204 .062 .074 .116 .286 .193 .070 .077 .360 .097
contrasting demands through collaboration with
the political leadership

Our County Maternal Health Program .116 .232 .242 .211 .226 **.740** .163 .059 .239 .093 .018 .213 .278 .047 .034 .052
incorporates political leadership for a
responsible and stable administration

Our County Maternal Health Program uses .027 .321 **.715** .243 .267 .214 .054 .305 .026 .138 .104 .043 .116 .066 .204 .046
political leadership to group those differing
answers into various categories that are
meaningful.

Employees are proud to work in the County Maternal Health Program and are comfortable to fully utilize their skills	.011	.481	.034	.105	.019	.239	.083	.763	.072	.105	.170	.047	.019	.071	.116	.024
Staffs in our County Maternal Health Program are motivated by financial rewards	.022	.241	.596	.163	.064	.047	.126	.011	.094	.005	.568	.162	.249	.243	.109	.158
Staff in our County Maternal Health Program have job descriptions that give them some autonomy and allow them to find their own solutions	.789	.008	.108	.256	.021	.326	.136	.206	.034	.126	.144	.088	.248	.019	.117	.057

Extraction Method: Principal Component Analysis.

a. 16 components extracted.

The above results allowed for the identification of which variables fall under each of the 16 major extracted factors. Each of the 105 parameters was looked at and placed to one of the 16 factors depending on the percentage of variability it explained the total variability of each factor. From the factor analysis, all the variables indicators high construct validity since all exceeded the prescribed threshold of 0.40 (Schindler, 2015).

RELIABILITY RESULTS

Planning for M&E

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.915	.914	25

A coefficient of alpha 0.7 indicates that the research instrument is reliable. Planning for M&E being 0.915 was reliable and thus appropriate for the study.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Our County Maternal Health Program management ensures that the resources allocated for M&E are adequate	53.7500	155.226	.661	.909
There is adequate allocations of resources for trainings in M&E for the County Maternal Health program	54.0313	148.741	.782	.904
The management of County Maternal Health Programs ensures purchase of M&E reference materials.	53.5625	164.319	.485	.914
The program officer writes up grant applications addressed to institutional donors for funding on time	53.6250	158.629	.593	.911
The County Maternal Health program officers communicates effectively with the public and develops a funding network with enthusiastic and committed supporters	54.0000	165.806	.368	.918
There are organized fund drives by the County Maternal Health program officers for supporting the planning for M&E	53.9688	166.547	.378	.917

Budget allocation influence effective planning for County Maternal Health programmes M&E	54.4063	155.152	.591	.911
The project budget provides a clear and adequate provision for M&E	53.8750	152.952	.725	.906
M&E frameworks ensures effectiveness and efficiency in utilization of resources in planning for M&E.	53.6563	157.007	.639	.909
M&E Frameworks are critical communication tools in relation to planning for M&E.	53.8438	156.523	.643	.909
M&E policy enhances the budget decision-making and management of planning for M&E of County Maternal Health programmes	53.8438	155.039	.624	.910
M&E policy ensures regular reporting on implementation progress of County Maternal Health programmes	53.7813	154.951	.761	.906
Strategic planning in support of M&E provides management of County Maternal Health programmes with information to facilitate programmes execution	53.8125	157.060	.603	.910
Strategic planning in support of M&E serves as a basis for accountability and learning by staff and management of County Maternal Health programmes	53.9688	151.773	.696	.907
Strategic planning in support of M&E gives technical assistance for strengthen planning for M&E	53.9375	152.254	.697	.907

ANOVA with Friedman's Test and Tukey's Test for Nonadditivity

		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig	
Between People		369.765	31	11.928			
Within People	Between Items	18.617 ^a	14	1.330	18.285	.194	
	Residual	Nonadditivity	1.089 ^b	1	1.089	1.080	.299
		Balance	436.428	433	1.008		
		Total	437.517	434	1.008		
Total		456.133	448	1.018			
Total		825.898	479	1.724			

Grand Mean = 3.8479

a. Kendall's coefficient of concordance $W = .023$.

b. Tukey's estimate of power to which observations must be raised to achieve additivity = 2.060.

Stakeholders Engagement in M&E

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.831	.809	25

From the output, reliability statistics obtained in Table 1.7, $0.931 > 0.7$ and on this basis it can be concluded that Stakeholders Engagement in M&E is reliable.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Advocacy to promote M&E helps donors understand the complexity of policy change and manage expectations in M&E	53.1563	171.878	.524	.930
Engaging all the stakeholders in planning an advocacy strategy ensures a shared understanding of the M&E achievement.	53.3438	164.555	.788	.923
Different perceptions of stakeholders affects the advocacy strategies to promote M&E	53.5625	166.835	.735	.924
The impact and influence of the	53.3125	173.254	.490	.931

stakeholders on M&E is considered in identification of stakeholders				
The stakeholder identification involves collaboration between management and beneficiaries of the County Maternal Health programmes	53.5625	164.577	.725	.924
The stage of M&E helps in identification and selection of the right stakeholders for County Maternal Health programmes	53.3438	174.943	.590	.928
Stakeholder analysis helps in determining how the key stakeholders are included in the program	53.7500	160.387	.764	.923
There is an assessment of the influence, importance and level of impact of various stakeholder in M&E	53.9688	159.709	.761	.923
There are efficient communication strategies that ensures linkages between the stakeholders, the M&E team and program implementers	53.2500	167.032	.659	.926
Through communication the progress and the challenges facing the M&E process are communicated and addressed	53.0625	171.738	.538	.930
Collaborations amongst the different stakeholders greatly impacts the M&E process	53.1563	168.265	.564	.929
Partnerships increases the participation of the stakeholders in M&E of	53.1563	168.459	.620	.927

the County Maternal Health programmes				
The community participates in M&E design, planning and decision making for the County Maternal Health programmes	53.4375	161.415	.760	.923
The community participates in reporting of results of M&E for the programme.	53.2813	165.822	.779	.923
Community participates in identifying the measurements to show extent of progress achieved in the County Maternal Health programmes.	53.2813	165.757	.665	.926

ANOVA with Friedman's Test and Tukey's Test for Nonadditivity

		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig	
Between People		394.192	31	12.716			
Within People	Between Items	27.125 ^a	14	1.938	29.716	.008	
	Residual	Nonadditivity	6.529 ^b	1	6.529	7.533	.006
		Balance	375.279	433	.867		
		Total	381.808	434	.880		
Total		408.933	448	.913			
Total		803.125	479	1.677			

Grand Mean = 3.8125

a. Kendall's coefficient of concordance $W = .034$.

b. Tukey's estimate of power to which observations must be raised to achieve additivity = 3.064.

Capacity Building for M&E

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.773	.694	25

A coefficient of alpha 0.7 indicates that the research instrument is reliable. Capacity Building for M&E being 0.934 was reliable and thus appropriate for the study.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The program managers identifies skilled personnel to carry out the monitoring and evaluation functions	54.5625	193.609	.428	.936
The programmes officers ensure that the M&E staff have adequate comprehension to rely on information provided by M&E	54.6563	187.652	.615	.931
Project training need analysis is done to ensure the right skills are acquired to manage the M&E activities for County Maternal Health programmes	54.7813	185.209	.621	.931
Training equips the stakeholders with the necessary skills to conduct M&E for the programmes	55.0000	177.355	.777	.926
Supervision is essential in enhancing the implementation of M&E in County Maternal Health programmes	54.8750	181.145	.753	.927
Training and supervision ensures that the M&E staff understands their roles and responsibilities in M&E process.	54.7188	185.434	.613	.931
There is M&E Workforce Development Plan in County Maternal Health programmes which ensures that resources are used judiciously in fulfilling the goals of the project.	54.5625	188.125	.627	.931
In County Maternal Health programmes, M&E Workforce Development Plan is used to help ensure the	54.6250	185.210	.719	.928

M&E staff with the most appropriate skill sets are assigned to tasks within the project				
In there is an M&E plan for County Maternal Health programmes to avoid confusion and conflicts among the M&E team members	55.0313	176.483	.761	.927
M&E Champions promotes quality and consistency in M&E practice for the programme	54.7813	182.564	.727	.928
M&E Champions develops an organizational culture that supports the use of M&E data in enhancing the programme performance	54.7500	182.323	.741	.928
M&E Champions helps build adequate capacity in specific competencies for the programme M&E	54.7188	185.499	.611	.931
The County Maternal Health programmes have a surveillance system which assures that M&E systems are operating effectively	54.6875	183.964	.649	.930
The surveillance system allows the M&E staff to assess the usefulness of County Maternal Health programmes and also assess how M&E initiatives helps them achieve its goals and objectives	54.8438	183.104	.647	.930
IT capacity of the M&E staff for the programme affects their involvement in some stages of M&E which needs IT	55.0313	177.967	.785	.926

ANOVA with Friedman's Test and Tukey's Test for Nonadditivity

	Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig
Between People	433.792	31	13.993		
Between Items	10.825 ^a	14	.773	11.756	.626

Within People	Residual	Nonadditivity	9.833 ^b	1	9.833	10.865	.001
		Balance	391.876	433	.905		
		Total	401.708	434	.926		
	Total	412.533	448	.921			
Total			846.325	479	1.767		

Grand Mean = 3.9125

a. Kendall's coefficient of concordance $W = .013$.

b. Tukey's estimate of power to which observations must be raised to achieve additivity = 4.922.

Data Management for M&E

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.819	.783	25

A coefficient of alpha 0.7 indicates that the research instrument is reliable. Data Management for M&E being 0.919 was reliable and thus appropriate for the study.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Routine data collection for the programme allows M&E implementers to gather qualitative data within a short period	55.7813	130.434	.732	.910
The County Maternal Health programmes have M&E staff responsible for routine data collection	55.5625	138.512	.611	.914
The routine data collection facilitates the decision making process in County Maternal Health programmes	55.7188	137.112	.678	.912
The County Maternal Health programmes M&E systems produce data that is complete and accurate	55.7813	139.402	.651	.913
Data analysis and auditing facilitates the evaluation of data quality at health facilities, as a part of routine supervisory visits.	55.7813	136.628	.664	.912

M&E data analysis helps in pointing out the areas of concern in the County Maternal Health programmes	55.5000	144.065	.494	.917
Data analysis for the County Maternal Health programmes makes it possible to make the right decisions in M&E	55.7188	138.209	.634	.913
Data auditing helps the stakeholders to understand every stage of M&E process for the programme	55.4688	139.676	.518	.917
The data dissemination is done through the relevant programme stakeholders to support the M&E systems	55.6250	135.984	.673	.912
The dissemination of M&E is mostly done during the M&E sessions	55.5313	137.934	.538	.916
The program officers facilitates the M&E data dissemination	55.5938	138.378	.560	.915
The M&E data dissemination for the programme is timely and efficiently done to give room for decision making process	55.6250	134.242	.761	.909
The challenges faced during the M&E process are identified through the collected data	55.6563	135.459	.572	.915
The M&E data is used in County Maternal Health programmes to decide which stages need adjustments	55.6250	133.081	.657	.912
The M&E data points out the challenges facing every stage of M&E process hence coming up with solutions to enhance the programme	55.7813	132.628	.699	.911

ANOVA with Friedman's Test and Tukey's Test for Nonadditivity

		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig
Between People		322.633	31	10.408		
Within People	Between Items	5.137 ^a	14	.367	6.169	.962
	Residual Nonadditivity	2.496 ^b	1	2.496	2.957	.086

		Balance	365.433	433	.844		
		Total	367.929	434	.848		
	Total		373.067	448	.833		
Total			695.700	479	1.452		

Grand Mean = 3.9750
a. Kendall's coefficient of concordance $W = .007$.
b. Tukey's estimate of power to which observations must be raised to achieve additivity = 4.379.

Contextual Determinants

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.892	.832	25

A coefficient of alpha 0.7 indicates that the research instrument is reliable. Contextual Determinants being 0.898 was reliable and thus appropriate for the study.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
There is a defined structure for communication in the County Maternal Health Program	55.5313	120.257	.574	.891
Employees and beneficiaries of the programmes easily access section heads in the County Maternal Health Program	55.7813	115.273	.643	.888
Organizational structure in our County Maternal Health Program does not support M&E system	55.5625	120.254	.526	.893
Our County Maternal Health Program does not encourage micromanagement of staff	55.2813	124.725	.512	.894
Team work is always exercised in our County Maternal Health Program	55.5000	120.258	.633	.889
Our County Maternal Health Program has a clear strategic plan	55.5000	124.000	.424	.897
Performance of maternal health programmes is linked to time Computational Complexity	55.6250	119.597	.550	.892
Information-Based Complexity greatly affect performance of maternal health programmes	55.5313	121.031	.607	.890
There is a clear and effective communication process in our County Maternal Health Program	55.4688	122.451	.568	.892
Communicating decisions is efficient in our County Maternal Health Program	55.7813	115.144	.766	.883
Feedback is always received from communications made in our County Maternal Health Program	55.8125	120.867	.653	.889

There is shortage of essential supplies and equipment for County Maternal Health Program in most facilities	55.7188	122.531	.579	.891
There is inadequate staffing for County Maternal Health Program in our health facilities	55.6563	127.588	.275	.903
Financial capacity is inadequate to regularly train our staff to upgrade in our medical standards	55.9688	116.934	.641	.888
There is an agile organization strategy in our facilities spearheaded by the management to ensure success of the County Maternal Health Program	56.0313	115.064	.723	.885

ANOVA with Friedman's Test and Tukey's Test for Nonadditivity

		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig	
Between People		283.567	31	9.147			
Within People	Between Items	18.012 ^a	14	1.287	19.026	.164	
	Residual	Nonadditivity	5.191 ^b	1	5.191	5.606	.018
		Balance	400.930	433	.926		
		Total	406.121	434	.936		
	Total	424.133	448	.947			
Total		707.700	479	1.477			

Grand Mean = 3.9750
a. Kendall's coefficient of concordance $W = .025$.
b. Tukey's estimate of power to which observations must be raised to achieve additivity = 3.776.

Behavioural Determinants

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.941	.906	25

A coefficient of alpha 0.7 indicates that the research instrument is reliable. Behavioural Determinants being 0.941 was reliable and thus appropriate for the study.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Staff have a positive attitude towards emerging opportunities in County Maternal Health Program	52.2188	206.822	.571	.940
In our County Maternal Health Program employees have good attitudes towards work	52.4063	199.475	.681	.937
Staff in our County Maternal Health Program have high morale to elevate the moods of their teams and even their supervisors	51.9688	206.999	.607	.939
Staff in our County Maternal Health Program have skills in understanding M&E frameworks	52.0313	202.225	.721	.936
Staff in our County Maternal Health Program are involved in identifying and developing performance indicators	52.3125	198.093	.755	.935
Staff in our County Maternal Health Program are always involved in undertaking quarterly reports	52.0625	205.157	.678	.937
Our County Maternal Health Program provide all stakeholders and the public with appropriate information so that they can understand the process	52.3438	195.652	.720	.936

Our County Maternal Health Program uses stakeholder's framework to identify the needs to analyze the different levels of the issues that occur in the programme	52.0625	199.867	.698	.936
Our County Maternal Health Program provide multiple rounds opportunities to stakeholders for revising individual views in response to group trends	52.0000	201.419	.664	.937
Our County Maternal Health Program balances contrasting demands through collaboration with the political leadership	52.0000	202.065	.731	.936
Our County Maternal Health Program incorporates political leadership for a responsible and stable administration	52.1875	198.673	.718	.936
Our County Maternal Health Program uses political leadership to group those differing answers into various categories that are meaningful.	52.2813	196.854	.702	.937
Employees are proud to work in the County Maternal Health Program and are comfortable to fully utilize their skills	52.1563	199.297	.758	.935
Staffs in our County Maternal Health Program are motivated by financial rewards	51.8125	206.028	.655	.938
Staff in our County Maternal Health Program have job descriptions that give them some autonomy and allow them to find their own solutions	51.9688	201.257	.779	.935

ANOVA with Friedman's Test and Tukey's Test for Nonadditivity

		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig	
Between People		475.615	31	15.342			
Within People	Between Items	12.617 ^a	14	.901	13.836	.462	
	Residual	Nonadditivity	3.173 ^b	1	3.173	3.498	.062
		Balance	392.744	433	.907		
	Total	395.917	434	.912			
Total		408.533	448	.912			
Total		884.148	479	1.846			

Grand Mean = 3.7229
a. Kendall's coefficient of concordance $W = .014$.
b. Tukey's estimate of power to which observations must be raised to achieve additivity = 2.875.

Performance of maternal health programmes

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.909	.872	25

A coefficient of alpha 0.7 indicates that the research instrument is reliable. Performance of maternal health programmes being 0.909 was reliable and thus appropriate for the study.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
In our County Maternal Health Program complaints are constructively handled	54.1250	153.597	.550	.905
Staff in our County Maternal Health Program are flexible to meet customer needs and ensure full Antenatal care coverage	54.5313	151.676	.549	.905
Our County Maternal Health Program always achieves the targets set out in the County Integrated Development Plan (CIPD).	54.0313	156.096	.489	.907
Staff in our County Maternal Health Program performs the activities and obtain the products in the timelines established	54.3750	158.758	.373	.910
The county works closely with the national M&E team to reduce maternal mortality ratio.	54.6250	148.435	.635	.902

Staffs in County Maternal Health Program have enhanced the Proportion of fully immunized population of children under one year	54.3750	149.597	.627	.903
Mothers are given advices on the benefits of exclusive breastfeeding for the first six months	54.4063	148.572	.569	.905
The County Maternal Health Program have increased the percentage of births assisted by qualified health staff	54.4688	154.257	.439	.909
There is an increase in Proportion of demand for family planning services in our health facilities	54.5000	147.097	.663	.901
The number of children under five who are stunted have drastically reduced over the years	54.3750	147.919	.669	.901
Employees in our County Maternal Health Program feel that managers value their feedback	54.4688	143.547	.920	.893
Staff make sure that mothers and babies receive postnatal care within two days of birth	54.4688	148.064	.649	.902
Our County Maternal Health Program budget has the same priorities of reducing Maternal mortality rate as our county's development plan	54.6563	138.233	.765	.897
There is effective task scheduling in our County Maternal Health Program for enhancing the percentage of mothers receiving complete 4 courses of ANC services	54.2813	150.596	.572	.904
Our County Maternal Health Program sends reports on time	54.2500	150.516	.581	.904

ANOVA with Friedman's Test and Tukey's Test for Nonadditivity

	Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig

Between People		353.098	31	11.390			
Within People	Between Items	13.042 ^a	14	.932	12.657	.554	
	Residual	Nonadditivity	6.870 ^b	1	6.870	6.734	.010
		Balance	441.689	433	1.020		
		Total	448.558	434	1.034		
Total		461.600	448	1.030			
Total		814.698	479	1.701			

Grand Mean = 3.8854

a. Kendall's coefficient of concordance $W = .016$.

b. Tukey's estimate of power to which observations must be raised to achieve additivity = 4.288.