



Influence of Monitoring and Evaluation Practices on Performance of Health Projects: Evidence from SIKIKA Project in Dodoma and Dar es Salaam, Tanzania

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Abstract

A number of development projects fail due to insufficient Monitoring and Evaluation (M&E) initiatives. This study was conducted in Dodoma and Dar es Salaam regions of Tanzania to assess the influence of Monitoring and Evaluation (M&E) practices on the performance of the SIKIKA Health Project. A purposive sampling technique was adopted to select the respondents. A total of 71 respondents participated in this study. Data were collected through interviews, focus group discussions, and documentary reviews. Findings revealed that the M&E activities influenced the performance of the SIKIKA Health Project. The M&E activities that were being done by the SIKIKA Health Project include preparation and use of standard M&E tools (84.5%), reporting (73.2%), site visit (67.6%), supportive supervision (57.7%) and participatory monitoring (39.4%). Each of these activities was critical in ensuring the project's success. The mean score was 4, meaning that the respondents agreed that the SIKIKA Health Project considered the M&E plan at the initial stage of the planning process. Further findings showed that project staff were being trained to carry out M&E activities. Likewise, the respondents disagreed that community engagement was being done to ensure they were involved in the project monitoring. Regularity of M&E, stakeholders' participation, fund allocation, adoption of new technology, and management commitment had a significant influence ($P < 0.05$) on the performance of the project. The study findings conclude that the M&E practices influence project performance. The researchers recommend that for the SIKIKA to conduct M&E activities collaboratively should adopt a participatory M&E approach.

Subject Areas

Global Health, Public Health

Keywords

M&E Practices, M&E Planning, M&E Data Collection, M&E Knowledge Sharing, Health Projects, Tanzania

1. Introduction

The national development is intricately linked to the successful execution of projects spanning various sectors [1]. An indispensable facet of effective project management lies in monitoring and evaluation practices, which have evolved from primarily resource optimization to a pivotal factor for project achievement [2]. While historical focus was placed on prudent resource utilization, contemporary viewpoints prioritize monitoring and evaluation as critical components of success, transcending mere management tools, and instead, serving as instruments for project assessment and rectification [3]. This highlights the need for project managers and teams to regularly monitor progress, identify any deviations from the plan, evaluate the effectiveness of current strategies and tactics, and make adjustments to ensure that the project stays on track and achieves its goals.

Monitoring and Evaluation (M&E) practices play a crucial role in assessing the effectiveness of development projects, including those in the healthcare sector. In public health, M&E helps identify gaps, measure progress, and ensure accountability for those implementing health-related projects. For example, Tanzania has implemented comprehensive monitoring and evaluation frameworks to ensure accountability and improve project performance. These frameworks involve regular data collection, analysis, and reporting to assess the impact of healthcare projects on population health outcomes [4]. However, the impact of M&E on the performance of donor-funded health projects remains an area of exploration [2] [5].

Numerous studies have emphasized the importance of effective M&E practices in healthcare projects worldwide. For instance, a study by Chaulagai [6] highlights how M&E can enhance program management, resource allocation, and service delivery in low and middle-income countries. Additionally, a report by WHO [7] emphasizes that robust M&E systems are essential for achieving universal health coverage and sustainable development goals. In Africa, monitoring and evaluation practices have gained significant attention due to their potential to improve healthcare outcomes. Tadese *et al.* [8] highlight the need to strengthen M&E practices in Sub-Saharan Africa to ensure efficient resource allocation and evidence-based decision-making. Investing in M&E capacity building is, therefore, essential for improving health service delivery across the region.

Tanzania has made significant efforts to improve its healthcare systems through various project initiatives. However, the impact of these interventions can only be

fully understood through rigorous M&E practices. For instance, [9] has emphasized that Tanzania's health sector program performance and accountability can be improved through M&E. This implies that effective M&E practices help to identify gaps, measure progress, and inform evidence-based decision-making in healthcare projects. Reports show that most of the projects implemented in Tanzania have not performed well, and the time completion is a challenge, especially in the health sector, due to funding, inadequate technical skills, and inadequate monitoring during project implementation [10] [11] [12] [13].

The SIKIKA Health Project aims to enhance healthcare delivery in Dodoma and Dar es Salaam regions [14]. Its target is to enhance the well-being of marginalized sections of society such as women, children, and youth by providing access to quality healthcare services. SIKIKA is an acronym for “*Sauti ya Umma Kwa Maendeleo ya Afya*” which translates to “Public Voice for Health Rights” in English [15]. The SIKIKA intervention encompasses addressing shortages in healthcare resources, advocating for universal health coverage, improving healthcare management at the facility level, and empowering citizens within the facility governance committees. A strong emphasis on health education and promotion by SIKIKA seeks to bolster the health of women, children, and youth, and enhance disease prevention measures. This underscores the significance of comprehending how M&E practices impact the project's performance.

Thus, in order to address the influence of M&E practices on the performance of Health Projects, a comprehensive analysis was required. This study aimed to assess the influence of M&E practices on the performance of SIKIKA Health Project by examining the current monitoring and evaluation activities employed, the extent of monitoring and evaluation practices, and factors influencing the performance of SIKIKA Health Projects in Tanzania. To be able to accomplish these, the study adopted the Theory of Change (ToC), and the Realistic Evaluation Theory (RET). The ToC is a critical framework for community-based change by ensuring alignment between activities and desired outcomes [16]. On the other hand, the RET provides a model that focuses on figuring out the outcomes that emerge from project interventions, how they are produced, and their impacts [17].

2. Methodology

The study was carried out in the Dodoma and Dar es Salaam regions of Tanzania. These regions were selected due to the significant presence of the SIKIKA Health Governance Project, with Dar es Salaam serving as the organization's headquarters and Dodoma having the primary operational office for project activities that extend to other regions. The choice of these regions ensured access to pertinent information that provided a comprehensive view of the project's overall landscape. The SIKIKA Health Governance Project was an ideal subject for this study, given its extensive involvement in managing health governance and its collaborative efforts with the government to achieve health sector objectives in the country.

The study employed a mixed approach with a cross-sectional survey design,

enabling the integration of quantitative and qualitative data collection and analysis methods. The cross-sectional survey approach enabled a comprehensive exploration of the relationships between M&E practices and project performance within the SIKIKA Health Governance Project context. The sampling frame for the study consisted of the entire population of Health Governance project practitioners in Dar es Salaam and Dodoma regions. This list was crucial for identifying and selecting individuals to be interviewed or surveyed to gather data and insights relevant to the research objectives. Based on that, the sampling unit included a practitioner who is actively engaged in the Health Governance projects of the SIKIKA organization. By selecting practitioners as the sampling unit, the study intended to capture a comprehensive view of the experiences, perspectives, and contributions of those directly involved in the project activities and processes.

A purposive sampling technique was adopted to select specific individuals or cases deliberately based on their unique characteristics or knowledge relevant to the study. The primary merit for purposively selecting individuals involved familiarity with SIKIKA Health Project as implementer. This targeted approach ensured that the collected data was relevant and meaningful, contributing directly to the research objectives. The SIKIKA Health Project was reported to have less than 100 project implementers in Dodoma and Dar es Salaam. This made ignoring the use of a formula for estimating the sample size rather than taking all the project implementers purposively. Qualitative and quantitative data were collected for the study. The qualitative data was transformed into numerical format through coding for the purpose of analysis. Primary data were collected through in-depth interviews, and focus group discussions, while the secondary data was collected through document reviews.

In order to examine the M&E of activities employed by the SIKIKA Health Project in Tanzania, data was analyzed through descriptive analysis. On the other hand, the influence of M&E practices on the performance of the SIKIKA Health project was analyzed through Likert scale and content analysis. Lastly, factors influencing the performance of SIKIKA Health Project in Tanzania were analyzed through inferential analysis (Binary logistic regression). The Binary logistic regression equation below shows the variables' relationship.

$$\ln\left[\frac{p}{1-p}\right] = \alpha + \beta_1\text{REME} + \beta_2\text{STPART} + \beta_3\text{FUND} + \beta_4\text{ADOPTTECHN} + \beta_5\text{MCOMMIT} + \varepsilon_i$$

where;

$\left[\frac{p}{1-p}\right]$ = Performance of donor funded health project in terms of time, cost and scope;

$\beta_1 \dots \beta_5$ = regression coefficients;

REME = Regularity of M&E (1 = Yes, 0 = No);

STPART = Stakeholders' participation, (1 = Participate, 0 = Not participate);

FUND = Fund allocation (1 = Applicable 0 = Otherwise);

ADOPTTECHN = Adoption of new technology (1 = Adopt, 0 = Not adopt);
MCOMMIT = Management commitment (1 = Committed, 0 = Otherwise).

Qualitative data collected from key informant interview, and focus group discussions was analysed through context analysis. This involved reading through transcripts, notes, or recordings to comprehend the content and context of the data; deductive coding (based on study objectives) and inductive coding (allowing for new themes to emerge); developing a coding framework to organize the identified themes or categories; contextual analysis by examining the broader contextual factors that influence the relationship between M&E and project performance; and interpreting the findings of the content analysis, and synthesizing the key insights and themes identified from the qualitative data.

3. Results

3.1. Socio-Demographic Characteristics of Respondents

The examined socio-demographic characteristics of respondents in the study areas included sex, age, education level, working experience and district. The findings on the socio-demographic characteristics of the respondents are presented in **Table 1**. With respect to the sex, the findings show that males comprised more than half (63.4%) of all respondents and females were few (36.6%). This provides the evidence that the males are the ones who tend to participate more on M&E than the females. This is due to different reasons such as domination by male staff in the NGOs, the nature of activities that need transect walk, the willingness to participate, and lack of information by most of the females. This finding is supported by that of [18] who found that in Uganda males were more likely to report positive health outcomes than females due to gender biases in reporting. The findings also differ from that of [19] who found that female respondents were more likely to prioritize social outcomes and community participation in M&E processes. This suggests that gender-sensitive approaches should be adopted to ensure that the voices and needs of both men and women are adequately represented in M&E processes.

Table 1. Demographic characteristics of respondents (n= 71).

Characteristics	Frequency	Percent (%)
Age		
<30 years	20	28.2
31 - 50 years	46	64.8
51+ years	5	7.0
Gender		
Male	45	63.4
Female	26	36.6
Level of education		
Certificate	3	4.2

Continued

Diploma	6	8.5
Bachelor's degree	54	76.1
Master's degree	8	11.3
Work experiences		
Below 1 year	4	5.6
1 - 5 years	29	40.8
6 and above years	38	53.5

As for the age, findings showed that the majority (64.8%) of respondents were aged between 31 - 50 years, while others (28.2%) were below 30 years. The findings provide evidence that the respondents that were aged 31 - 50 years are less energetic to perform the M&E activities at SIKIKA Health Project, since the project needs workers who have knowledge, skills, power and experience in M&E. The age of respondents could influence others to perform M&E in the project in order to ensure the project is performed well. The findings are supported by that of [20] who highlighted that younger respondents were more likely to embrace technology-driven M&E methods such as mobile data collection tools or remote sensing technologies. On the other hand, older respondents may have a deeper understanding of historical context. It is important to consider age diversity among respondents to ensure a comprehensive approach to M&E.

As for the education level, the findings showed that the majority of respondents were completed Bachelor's degree (76.1%), followed by Master's degree (11.3%), Diploma (8.5%), and Certificate (4.2%). This implies that the majority of respondents are educated and tend to understand more the needs of M&E on the performance of the projects. This highlights the importance of providing capacity-building opportunities for individuals with lower levels of education to ensure their meaningful participation in M&E practices. The findings are supported by that of [21] who found that respondents with higher levels of education were more likely to engage in rigorous data analysis techniques during M&E processes.

As for the work experience, findings showed that the majority (53.5%) of the respondents had worked for 6 and above years, followed by those who worked between 1 - 5 years (40.8%) and those who worked below 1 year (5.6%). This implies most of the respondents for the study were more familiar with the project and could easily give responses on issues related to the M&E of the SIKIKA Health Project. This finding corroborates that of [22] who found that general human capital, which increases with time spent in the workforce, positively affects work unit performance.

3.2. Monitoring and Evaluation Activities Employed by SIKIKA Health Project

Table 2 shows the findings on monitoring and evaluation activities employed by the SIKIKA Health Project in Tanzania. Variables involved were preparation and

use of standard M&E tools, site visit, supportive supervision, participatory monitoring and reporting.

3.2.1. Availability of M&E Staff

Findings indicate that 95.8% of the respondents reported that the staff responsible for M&E activities of SIKIKA Health Project were available. This implies that SIKIKA Health Projects had a well-established M&E system that included regular data collection, analysis, and reporting. However, the study noted that the project faced challenges related to the availability of M&E staff in remote areas where staff turnover was high. The head of unit reported that the project had a dedicated M&E team that was responsible for collecting and analyzing data, and that the team had received training in M&E techniques. This was supported by project implementers who had this to say:

“Having a dedicated and competent team of M&E staff has been instrumental in ensuring the effectiveness and accountability of the SIKIKA Health Project. Our M&E staffs are highly skilled in data collection, analysis, and reporting, and they play a key role in tracking project progress, identifying challenges, and suggesting evidence-based solutions. Their presence has enhanced our ability to make informed decisions, improve program efficiency, and demonstrate the impact of our interventions”.

These findings are supported by [23] who found that availability of M&E staff was a key factor in the success of a health project in Tanzania whereby the availability of trained M&E staff was able to collect and analyze high-quality data, identify challenges, and make adjustments as needed.

3.2.2. Monitoring and Evaluation Activities

Findings in **Table 2** further show that SIKIKA Health Project employs various M&E activities to assess the effectiveness and impact of its interventions. About

Table 2. Current monitoring and evaluation activities employed by the SIKIKA Health Project (n = 71).

Variable	Frequency	Percent (%)
Availability of staff responsible for M&E activities in SIKIKA Health Project		
Available	68	95.8
Not available	3	4.2
M&E activities employed by the SIKIKA Health Project		
Preparation and use of standard M&E tools	60	84.5
Reporting	52	73.2
Site visit	48	67.6
Supportive supervision	41	57.7
Participatory monitoring	28	39.4

Note: Data were based on multiple responses.

84.5% of the respondents reported that current M&E activities were preparation and use of standard M&E tools. This implies that SIKIKA Health Project uses standard M&E tools to collect data on various indicators, including health outcomes, service availability, and coverage. These tools are prepared in advance, and they are used to collect data on a regular basis. The use of standard tools ensures consistency and comparability of data across different sites and over time in the project. Most of the project implementers explained that standard M&E tools that were prepared for SIKIKA Health Project were Logical Framework Approach, performance indicators, data collection tools, and participatory evaluation are crucial for assessing the performance of SIKIKA Health Project. These tools provide a systematic approach to monitor progress, measure outcomes, and inform decision-making processes. This was noted from one of the project implementers had the following to say:

“We have developed a set of standardized M&E tools that are used across all our interventions. These tools help us collect consistent data, which is crucial for monitoring progress and evaluating the impact of our interventions”.

The finding is supported by [24] who found that the use of standard tools can improve the accuracy and reliability of data, allowing for more effective M&E of health programs. It is further supported by [25] which emphasizes the need for M&E tools to be well-designed, well-tested, and widely accepted by stakeholders. [26] also found that the selection of poor tools and techniques is one of the causes of M&E project failure in Tanzania. Even if the project lacks logic in its strategy or unrealistic goals are difficult to monitor and evaluate, project planning and M&E planning are the crucial basis for project M&E and these can significantly influence the success or failure of an M&E process [26].

About 73.2% of the respondents reported that current M&E activities at SIKIKA Health Project were reporting the progress and feedback about the performance of the project. This implies that SIKIKA Health Project requires regular reporting on the progress of its interventions. This includes the submission of reports by project manager, healthcare facilities, healthcare workers, and community volunteers. The reports are reviewed by the project team, and they are used to identify areas of success and areas for improvement. This was supported by data from face-to-face interview, where one of the respondents had this to say:

“We have established a reporting system that ensures timely submission of data from different sites. This allows us to track progress, identify challenges, and make informed decisions based on evidence”.

Findings are supported by that of [12] [27] which highlights that regular reporting is essential for ensuring the accountability of healthcare providers and the effectiveness of healthcare interventions as can help to identify areas for improvement and promote the adoption of best practices.

On the other hand, about 67.6% of the respondents reported that site visits were among the current activities done by SIKIKA Health Project. This implies that SIKIKA Health Project conducts regular site visits to healthcare facilities and communities to assess the implementation of its interventions. These visits

provide an opportunity for the project team to observe the delivery of healthcare services, interact with healthcare workers and community members, and identify areas for improvement. Findings in **Table 3** also indicate that the majority (54.9%) of the respondents reported that M&E officers were visiting the site every month, followed by every three months (8.5%), and every day (2.8%). The findings were supported by data from one of the health workers who had this to say:

“The project team regularly visits our facility to observe our practices and provide feedback. These visits help us identify areas for improvement and receive guidance on how to enhance our service delivery”.

These findings are supported by [28] who reported that regular on-site visits focused on outcomes and follow-up improve progress in reviewing and validating WASH projects in Kenya thereby helping the project team and management to make the necessary corrections and changes for the project to achieve its planned goals. Findings are also supported by [29] which show that site visits are an effective way of assessing the quality of healthcare services and identifying areas for improvement. The study emphasized the need for site visits to be well-planned, well-executed, and followed up with appropriate actions.

Findings in **Table 3** further indicate that about 57.7% of the respondents reported that supportive supervision is among the activities done by M&E teams at SIKIKA Health Project. This implies that SIKIKA Health Project provides supportive supervision to healthcare workers and community volunteers to ensure the quality of their work. This includes regular meetings, training, and mentorship. The project team also provides feedback and support to healthcare workers and community volunteers to help them improve their performance. The health workers involved in implementing the SIKIKA Health Project were also provided with guidance, mentoring, and technical assistance from project implementers. This activity aims to strengthen the capacity of health workers and ensure the effective delivery of services. One of the health workers had this to express appreciation:

“The project team conducts supportive supervision visits, where they provide us with valuable feedback and support. This has helped us enhance our skills and improve the quality of care we provide”.

The findings are supported by [30] who found that supportive supervision helps the utilization of infrastructural facilities smoothly to disabled learners in Kenya,

Table 3. Frequency of M&E staff visits at SIKIKA Health Project (n = 71).

Frequency	Frequency	Percent (%)
Everyday	2	2.8
Every month	39	54.9
Every three months	6	8.5
Every six months	1	1.4
None	23	32.4

the result is significantly associated with supportive supervision for M&E practices ($\chi^2 = 40.296$, $df = 4$ & $P\text{-value} = 0.000$) which emphasizes other project implementers to be convinced to use supportive supervision. According to [31], supportive supervision is essential for ensuring the quality of healthcare services and improving the performance of healthcare workers. The study emphasized the need for supportive supervision to be well-planned, well-executed, and tailored to the needs of healthcare workers and community volunteers.

3.3. Monitoring and Evaluation Practices on the Performance of the SIKIKA Health Governance Project

The M&E practices were analyzed based on planning process, technical aspects, stakeholders' involvement, community engagement and management participation. The five points—Likert scale was used to score extents of individuals on M&E practices towards performance of SIKIKA Health Project ranging from 1—indicating strongly disagree, 2—disagree, 3—neutral, 4—agree, and 5—strongly agree. The mean score was used to conclude the extent of M&E practices on the performance of the SIKIKA Health Project. Findings are shown in **Table 4**.

3.3.1. M&E Practices at Planning Process

M&E practices during the planning phase are critical to ensure that the project is well-planned, feasible, and aligned with the organization's objectives. According to a study by [32], effective M&E systems can help to improve project outcomes by identifying potential risks and issues early on, allowing for corrective actions. The findings reveal that the mean score on “at the project initial stage, the project allocates funds for M&E” was 4.0. This means that the overall respondents agreed with the allocation of funds for M&E activities. This is a critical component of project planning and implementation, and is essential for ensuring the effectiveness

Table 4. Extent of M&E practices at planning process (N = 71).

Planning process	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean score
At the project initial stage, the project allocates funds for M&E	2 (2.8)	4 (5.6)	2 (2.8)	46 (64.8)	17 (23.9)	4.0
The project plans contain the M&E planning process	3 (4.2)	4 (5.6)	12 (16.9)	42 (59.2)	10 (14.1)	3.7
The planning process is well detailed and utilized	3 (4.2)	11 (15.5)	24 (33.8)	31 (43.7)	2 (2.8)	3.2
The planning process helps to estimate the cost of the required resource for M&E	5 (7.0)	5 (7.0)	27 (38.0)	32 (45.1)	2 (2.8)	3.2
The project is able to develop a control mechanism to keep the project on track	5 (7.0)	19 (26.8)	21 (29.6)	24 (33.8)	2 (2.8)	2.9
The planning process supports decision making during project implementation	4 (5.6)	8 (11.3)	11 (15.5)	41 (57.7)	7 (9.9)	3.5

Figures in brackets are percentages. Mean score ranges 1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree.

and impact of development projects. Findings are supported by that of [33] who emphasize the importance of allocating funds for M&E during project design. The authors argue that integrating M&E into the initial budget ensures that it is given due consideration and avoids potential underfunding.

Findings further show that the mean score for “the project plans contain the M&E planning process” was 3.7. This means that the respondents had mixed feelings about the inclusion of M&E planning in the project plans. Others recognized the importance of monitoring and evaluating the project’s progress and impact, and appreciated the clarity and specificity that the M&E planning process brought to the project’s objectives and indicators; while others felt that the M&E planning process was an additional burden or complication that took away from the primary focus of the project. The findings are supported by [34] who found that project implementers in developing countries perceived M&E as a valuable tool for improving project performance, but also reported challenges in implementing M&E systems due to limited resources and capacity, also challenges in collecting and analyzing data due to insecurity and limited access to information.

Finding indicates that the mean score for “the planning process helps to estimate the cost of the required resource for M&E” was 3.2. This means that there were different opinions among project implementers regarding the extent to which the planning process helps in estimating resource costs for M&E. Some implementers believed that thorough planning allows for a more accurate estimation of resource requirements and associated costs. On the other hand, some implementers doubted the effectiveness of the planning process in estimating resource costs for M&E. Findings concur with those of [35] who emphasize that effective planning is essential for estimating the cost of M&E activities accurately. They argue that without proper planning, it becomes challenging to identify the necessary resources and allocate budgets effectively. The authors highlight that a well-structured planning process enables organizations to estimate costs more accurately and make informed decisions regarding resource allocation.

Further findings reveal that the mean score for “the planning process support decision-making during project implementation” was 3.5. This means that the overall respondents did not have a strong opinion or favourite regarding the level of support provided by the planning process for decision-making during project implementation. They were neither strongly in favour nor opposed to the level of support provided by the planning process for decision-making. This is due to the fact that planning process was adequate for their needs but did not provide any significant advantages or disadvantages in terms of decision-making support. Most of the implementers were also more focused on executing the plan rather than evaluating its effectiveness or making changes to it. Findings are supported by that of [36] who emphasize the role of planning in supporting decision-making by providing a structured framework for evaluating alternatives and selecting the most appropriate course of action.

3.3.2. M&E Practices through Technical Aspects

Findings on M&E practices through technical aspects are shown in **Table 5**. Findings revealed that the mean score for “project staff are trained in order to equip them with the technical expertise necessary to carry out M&E” was 4.0. This means that respondents agreed with the importance of training project staff in technical skills required for M&E activities. This is a crucial aspect of project implementation, as it ensures that project staff have the necessary expertise to collect, analyze, and interpret data that will inform project decision-making and progress. Findings are supported by [20] who found that trained staff were better equipped to communicate M&E findings to stakeholders, facilitating dialogue and collaboration. This engagement ensures that project outcomes align with stakeholder expectations and needs.

Results in **Table 5** reveal that the mean score for “project staff are trained in order to equip them with technical expertise necessary to carry out M&E” was 2.6. This means that the overall respondents believed that technical skills alone do not determine the success of M&E activities. Instead, they emphasized the importance of other factors, such as background-related knowledge, communication skills, and experience. Findings concur with that of [37], who highlight the significance of technical skills in M&E and argue that technical skills are crucial for ensuring data quality and reliability. Results in **Table 5** also reveal that the mean score for “technical skills are a huge determinant on how best M&E is done” was 2.4. This means that there was a disagreement among the individuals responsible for implementing the project regarding whether the project had successfully identified competent personnel to handle M&E tasks in SIKIKA Health Project. Findings are supported by [33] which emphasizes the need for specialized skills in M&E, including data collection, analysis, and reporting. The report suggests that

Table 5. Extent of M&E practices through technical aspect (N = 71).

Technical aspect	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean score
Project staff are trained in order to equip them with technical expertise necessary to carry out M&E	2 (2.8)	3 (4.2)	2 (2.8)	44 (62.0)	20 (28.2)	4.0
Technical skills are a huge determinant of how best M&E is done	3 (4.2)	42 (59.2)	9 (12.7)	12 (16.9)	5 (7.0)	2.6
The project identifies skilled personnel to carry out the M&E functions	5 (7.0)	35 (49.3)	23 (32.4)	8 (11.3)	0 (0.0)	2.4
The project’s design is flexible to achieve better project results	4 (5.6)	12 (16.9)	38 (53.5)	5 (7.0)	12 (16.9)	3.1
Project training need analysis is done to ensure the right skills are acquired to manage the M&E activities	3 (4.2)	4 (5.6)	12 (16.9)	46 (64.8)	6 (8.5)	3.6

Figures in brackets are percentages. Mean score ranges 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree.

organizations should invest in capacity-building programs to enhance the skills of their staff members involved in M&E functions.

Likewise, results in **Table 5** reveal that the mean score for “the project’s design is flexible to achieve better project results” was 3.1. This means that the overall respondents responsible for implementing projects had a neutral attitude regarding the flexibility of project design in achieving improved project outcomes. This means that implementers did not have a strong opinion on flexible project designs. Findings are supported by [38], who found that projects with higher levels of design flexibility had better performance outcomes, including improved cost control, schedule adherence, and client satisfaction.

Findings in **Table 5** further indicate that the mean score for “project training need analysis is done to ensure the right skills are acquired to manage the M&E activities” was 3.6. This means that the overall respondents were neutral. Findings are supported by [39], who emphasize that conducting a training needs analysis is a critical step in identifying skill gaps and designing appropriate training interventions. They argue that such an analysis enables project managers to tailor training programs to meet specific needs, ensuring that team members acquire the necessary skills to effectively carry out M&E activities.

3.3.3. M&E Practices through Stakeholders’ Involvement

Findings on M&E practices through stakeholders’ involvement are shown in **Table 6**. Results revealed that the mean score for “stakeholder analysis is done to ensure all the stakeholders are involved in project monitoring” was 3.2. This means that the respondents were neutral. Stakeholder analysis is a process that identifies and analyzes individuals, groups, or organizations that may affect or be affected by a project. It helps in understanding their interests, expectations, and potential impact on the project’s success. Findings are supported by [40], who

Table 6. Extent of M&E practices through stakeholders’ involvement (N = 71).

Stakeholders’ involvement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean score
Stakeholder analysis is done to ensure all the stakeholders are involved in project monitoring	3 (4.2)	11 (15.5)	24 (33.8)	31 (43.7)	2 (2.8)	3.2
Stakeholders feedback is well captured and analyzed for implementation	5 (7.0)	5 (7.0)	27 (38.0)	32 (45.1)	2 (2.8)	3.2
Communication strategy is developed to address the flow of information	4 (5.6)	8 (11.3)	11 (15.5)	41 (57.7)	7 (9.9)	3.5
Participation of stakeholders reflects the community needs and stimulates people’s interest in the implementation of M&E	4 (5.6)	13 (18.3)	7 (9.9)	29 (40.8)	18 (25.4)	3.6
It enables the stakeholders to influence product acceptance based on their needs	8 (11.3)	7 (9.9)	21 (29.6)	33 (46.5)	2 (2.8)	3.1

Figures in brackets are percentages. Mean score ranges 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree.

found that project managers can identify potential conflicts, power dynamics, and communication channels among stakeholders by conducting a thorough stakeholder analysis. This knowledge enables them to design appropriate strategies for involving stakeholders in project monitoring activities.

Results in **Table 6** indicate that the mean score for “stakeholders feedback is well captured and analyzed for implementation” was 3.2. This means that the project implementers did not show any bias towards the feedback received from stakeholders, and they carefully analyzed and considered all feedback before making decisions about the project’s implementation. Findings are supported by [41], who found that stakeholders’ perceptions and opinions can significantly influence the success or failure of change initiatives.

Results in **Table 6** also reveal that the mean score for “communication strategy is developed to address the flow of information” was 3.5. This means that the project implementers did not have a strong opinion on the communication strategy used to manage the flow of information during the project. The communication strategy was developed to address the flow of information, but the implementers were neutral on its effectiveness. Findings concur with [42], who found that effective communication strategies were essential for addressing the flow of information during times of change, arguing for a well-designed communication strategy to help organizations overcome resistance to change, enhance employee engagement, and ensure successful project implementation.

Likewise, results in **Table 6** reveal that the mean score for “participation of stakeholders reflects the community needs and stimulates people’s interest in the implementation of M&E” was 3.6. This means that the project implementers remained neutral and open to the involvement of stakeholders. This may align with the needs of the community and may foster interest among individuals in the M&E process. By allowing stakeholders to actively participate in the project, their perspectives and insights can be incorporated, leading to more effective M&E practices. Findings are supported by [43] who emphasized that stakeholder participation can enhance the legitimacy and credibility of M&E processes, thereby attracting more individuals to actively participate.

The result in **Table 6** further reveals that the mean score for “it enables the stakeholders to influence the product acceptance based on their needs” was 3.1. This means that the overall respondents did not have a biased opinion on whether it allows stakeholders to have an impact on the acceptance of the final product based on their specific requirements and preferences. Findings are supported by [28], who found that most of the staff and employees working for AMREF Health Africa in Kenya did not agree that stakeholders were involved in the M&E decision-making process and the stakeholders were partially involved in the planning of formal meetings for M&E in the organization and this has since impacted M&E practices.

3.3.4. M&E practices through community engagement

Findings in **Table 7** indicate that the mean score for “Community engagement

analysis is done to ensure that they are involved in project monitoring” was 2.7. This means that the respondents disagreed that community engagement analysis is done to ensure they are involved in project monitoring. There was a disagreement among project implementers regarding the importance of conducting community engagement analysis to ensure community involvement in project monitoring. The findings further show that some project implementers did not value active community involvement in monitoring the progress and outcomes of a project. The community was not involved in the M&E of project activities as some of the implementers ignored the role of involving the community in activities. The findings are supported by [44], who found that involving local communities in project monitoring enhances environmental stewardship and promotes sustainable practices. The study highlighted how community engagement analysis can lead to better decision-making regarding resource management, conservation efforts, and mitigation strategies.

Findings in **Table 7** reveal that the mean score for “community feedback is well captured and analyzed for implementation” was 2.5. This means that there was disagreement among the individuals responsible for implementing a project regarding the effectiveness of capturing and analyzing community feedback during the implementation process. This means that some project implementers believe that community feedback is not adequately collected or properly analyzed. The findings are supported by [45], who emphasized that involving patients and the wider community in research design, implementation, and evaluation leads to more relevant findings and improved health outcomes. They highlighted that community feedback helps identify research priorities, ensures ethical considerations are addressed, and enhances the overall quality of healthcare services.

Findings in **Table 7** also reveal that the mean score for “Communication strategy is developed to address the flow of information” was 2.6. This means that the respondents disagreed that the SIKIKA Health Project had no communication strategy developed to address the flow of information among the project team in an organization. The findings are supported by [21], who emphasizes that a well-developed communication strategy ensures information flows smoothly within

Table 7. Extent of M&E practices through community engagement (N = 71).

Community engagement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean score
Community engagement analysis is done to ensure that they are involved in project monitoring	5 (7.0)	31 (43.7)	15 (21.1)	18 (25.4)	2 (2.8)	2.7
Community feedback is well captured and analyzed for implementation	1 (1.4)	46 (64.8)	9 (12.7)	13 (18.3)	2 (2.8)	2.5
Communication strategy is developed to address the flow of information	0 (0.0)	44 (62.0)	6 (8.5)	21 (29.6)	0 (0.0)	2.6

Figures in brackets are percentages. Mean score ranges 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree.

the organization, enabling employees to make informed decisions and contribute effectively to the organization's goals.

3.3.5. M&E Practices through Management Participation

Findings in **Table 8** reveal that the mean score for “there is visible support and commitment by management towards the project performance” was 4.0. This means that the overall respondents agreed. The top management was actively involved in the project, and it demonstrated its support through visible actions and commitment. Strong leadership and management support are critical factors in ensuring successful projects. The management helps to establish a clear direction and vision for the project, which can help to align the efforts of team members and stakeholders while improving communication and collaboration. The findings are supported by [46], who found that projects with strong management support tend to have higher success rates and better outcomes. This means that top management commitment is a key driver of project success.

Findings in **Table 8** also reveal that the mean score for “management participation helps produce effective communication to meet the project objectives” was 3.0. This means that there was a management involvement in ensuring successful communication within a project to achieve its objectives. When the management actively participates in project activities, it positively impacts communication effectiveness, leading to better outcomes. Effective communication is crucial for the success of any project. It enables team members to understand their roles and responsibilities, share information, coordinate tasks, and make informed decisions. These findings are supported by [47], who found that management participation in communication can help to improve the quality of project deliverables.

Table 8. Extent of M&E practices through management participation (N = 71).

Management participation	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean score
There is visible support and commitment by management towards the project's performance	3 (4.2)	8 (11.3)	12 (16.9)	11 (15.5)	37 (52.1)	4.0
Management participation helps produce effective communication to meet the project objectives	3 (4.2)	36 (50.7)	2 (2.8)	24 (33.8)	6 (8.5)	3.0
Management ensures effective use of lessons learned in different projects for future decision-making and improved project delivery	4 (5.6)	11 (15.5)	29 (40.8)	16 (22.5)	11 (15.5)	3.2
It ensures ownership, learning and sustainability of results	3 (4.2)	4 (5.6)	12 (16.9)	46 (64.8)	6 (8.5)	3.6
Management involvement enhances the credibility of the evaluation process and ensure increased acceptance of the findings	3 (4.2)	11 (15.5)	24 (33.8)	31 (43.7)	2 (2.8)	3.2

Figures in brackets are percentages. Mean score ranges 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree.

Likewise, findings in **Table 8** reveal that the mean score for “management ensures effective use of lessons learned in different projects for future decision making and improved project delivery” was 3.2. This means that the implementers of SIKIKA Health Project were neutral on the effectiveness of management in ensuring the use of lessons learned from one project to improve future decision making and project delivery. The project managers were not actively seeking to apply lessons learned from previous projects to improve their current and future projects. They did not have the authority to implement changes based on lessons learned from previous projects. Others reported that they did not have access to the necessary information or data to identify and apply lessons learned. These findings are supported by [48] who emphasizes the importance of creating a culture that encourages open communication and knowledge sharing. This can be achieved through various mechanisms such as post-project reviews, team meetings, and knowledge-sharing platforms. By actively promoting the dissemination of lessons learned, the management enables individuals and team members to benefit from each other’s experiences and avoid repeating past mistakes.

Findings in **Table 8** further reveal that the mean for “it ensures ownership, learning and sustainability of results was 3.6. This means that the respondents were neutral on management participation in decision-making processes regardless of having several positive outcomes such as increased ownership, learning opportunities, and long-term sustainability of the results achieved. When employees are given the opportunity to actively participate in decision-making processes, they develop a sense of ownership over the outcomes. This ownership leads to increased motivation, commitment, and accountability towards achieving the desired results. The findings are supported by [49], who found that management involvement can also enhance organisational learning and development.

In addition, findings in **Table 8** show that the mean score for “management involvement enhances the credibility of the evaluation process and ensures increased acceptance of the findings” was 3.2. This means that the management’s involvement in the evaluation process can have several positive effects. By avoiding bias and conflicts of interest, a neutral approach can enhance the credibility of the evaluation process and increase the likelihood that the findings will be accepted by all stakeholders. When conducting an evaluation, it is crucial to ensure that the process is fair, unbiased, and transparent. The findings are supported by [50], who found that involving management in early stages helps to align evaluation objectives with organizational goals and priorities. This alignment increases the relevance and usefulness of the evaluation findings, as they are directly linked to management’s strategic objectives. Additionally, management involvement ensures that the evaluation design incorporates key performance indicators and metrics that are important to the decision-making processes.

3.4. Factors Influencing the Performance of SIKIKA Health Project Governance

Binary multiple logistic regression analysis was carried out to examine factors that

influence the performance of the SIKIKA Health Project, with explanatory variables being regularity of monitoring and evaluation, stakeholders' participation, fund allocation, adoption of new technology and management commitment, and the dependent variable being performance of SIKIKA Health Project. The findings are presented in **Table 9** below.

3.4.1. Regularity of Monitoring and Evaluation

Findings indicate that regularity of monitoring and evaluation had a positive significant ($P < 0.05$) relationship with the performance of SIKIKA Health Project, which implies that the performance of SIKIKA Health Project was associated with regular M&E. Using Odds Ratio (OR), regularity of monitoring and evaluation was more likely to influence project performance almost by six times (OR = 5.974, 95% CI 1.062 - 33.585). This implies that regular M&E is essential for the successful implementation of any project. Regular M&E ensures that the SIKIKA Health Project stays on track and that any issues or challenges that arise can be addressed immediately. This factor also helps to measure the progress of the project and identify areas that require improvement. The findings are supported by [23], who found that regular M&E improved the quality of care and patient outcomes in health facilities in Tanzania.

3.4.2. Stakeholders' Participation

Findings showed that there was a significant ($P < 0.05$) relationship between stakeholders' participation and the performance of SIKIKA Health Project. Based on the Odds Ratio (OR), stakeholders' participation was more likely to increase the likelihood of project performance by 1 time compared to the project, which did not involve stakeholders during project life Cycle (OR = 1.242, 95% CI). This implies that stakeholders' participation is a key factor that influences the performance of the SIKIKA Health Project. Stakeholders include community members, healthcare providers, government officials, and other individuals or organizations with an interest in the project. Their participation ensures that the project is responsive to the needs of the community and that it aligns with the priorities of the

Table 9. Factors that influence the performance of SIKIKA Health Project Governance.

Independent variable	B	S. E	Wald	Sig	df	Exp(B)	95% CI for Exp(B)	
							Lower	Upper
Regularity of Monitoring and evaluation	1.787	0.881	4.116	0.042	1	5.974	1.062	33.585
Stakeholders' participation	1.417	0.708	4.014	0.045	1	1.242	0.061	0.970
Fund allocation	2.421	0.771	9.860	0.002	1	11.262	2.484	51.055
Adoption of new technology	-1.569	0.744	4.441	0.035	1	0.208	0.048	0.896
Management commitment	1.724	0.822	4.404	0.036	1	0.178	0.036	0.892
Constant	3.608	1.084	11.073	0.001	1	36.908		

Significant at ($P < 0.05$) Non-Significant at ($P > 0.05$), $\chi^2 = 19.159$, Cos and Snell $R^2 = 0.437$, Nagelkerke R-square (R^2) = 0.661.

local government. The findings are supported by [51] [52], who found that stakeholders' participation increased the likelihood of successful project implementation and improved the sustainability of health projects.

3.4.3 Fund Allocation

Findings indicate that funds allocation had a positive significant ($P < 0.05$) relationship with the performance of SIKIKA Health Project, which implies that the performance of SIKIKA Health Project was associated with fund allocation. Using Odds Ratio (OR), fund allocation was associated with the performance of SIKIKA Health Project by eleven times ($OR = 11.262$, 95% CI 2.484 - 51.055). This implies that fund allocation is another important factor that influences the performance of the SIKIKA Health Project. Sufficient funding is necessary to ensure that the project can deliver its intended outcomes. However, fund allocation must be done carefully to ensure that resources are used efficiently and effectively. The findings are supported by [53] who found that adequate funding was associated with better health outcomes in low-income countries.

3.4.4. Adoption of New Technology

Findings indicate that adoption of new technology had a positive significant ($P < 0.05$) relationship with performance of SIKIKA Health Project which implies that performance of SIKIKA Health Project was associated with adoption of new technology. Using Odds Ratio (OR), the adoption of new technology was associated with performance of SIKIKA Health Project ($OR = 0.208$, 95% CI 0.048 - 0.896). This implies that adoption of new technology is a factor that influences the performance of the SIKIKA Health Project. New technology improved the efficiency and effectiveness of healthcare services, but one of the health workers reported that the new technology is expensive and requires significant investment in training and infrastructure. The findings concur with those of [54] who found that Electronic Health Record (EHR) implementation positively affected clinical decision-making, reduced medication errors, and improved patient outcomes. Similarly, a systematic review by [55] demonstrated that telemedicine interventions improved access to care, reduced hospitalizations, and enhanced patient satisfaction.

3.4.5. Management Commitment

Findings indicate that management commitment had a positive significant ($P < 0.05$) relationship with SIKIKA Health Project performance which implies that performance of SIKIKA Health Project was associated with effective management commitment to implement the objectives of the project. Using Odds Ratio (OR), the management commitment was associated with performance of SIKIKA Health Project and less likelihood to influence project performance ($OR = 0.178$, 95% CI 0.036 - 0.892). This implies that strong management commitment is necessary to ensure that the project stays on track and that resources are used effectively. Strong management commitment at SIKIKA Health Project was ensuring the improved quality of care and efficiency of healthcare service. The findings are supported by [56] who explored the impact of leadership commitment on the implementation of quality

improvement initiatives in healthcare organizations. The findings indicated that strong leadership commitment positively influenced staff engagement, teamwork, and overall project success. Similarly, [57] [58] highlights the significance of management commitment in the success of healthcare innovation adoption.

4. Conclusions

This study was undertaken to assess the influence of M&E practices on the performance of health projects. The findings revealed that the main M&E activities that were implemented at SIKIKA Health Project were the preparation and use of standard M&E tools, reporting, site visits, supportive supervision and participatory monitoring. This implies that while most of the critical activities for the successful M&E are adopted by the SIKIKA Health Project, less emphasis is given to participatory monitoring. M&E practices for the SIKIKA Health Project performance included fund allocation, project plans, detailed planning process and decision-making supported by the planning process. The factors that positively influenced the performance of the SIKIKA Health Project included the regularity of M&E, stakeholders' participation, fund allocation, adoption of new technology, and management commitment. This implies that the identified factors are crucial for a successful M&E process. Based on these findings, the study recommends that the Ministry of Health should strengthen and improve institutional capacity by training the M&E staff and allocating enough funds for M&E activities. It is also crucial to strengthen partnerships and collaboration among stakeholders such as government agencies, non-governmental organizations, community-based organizations, and international donors to ensure effective M&E of health projects to ensure effective project implementation.

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Ethics Approval and Consent to Participate

All the ethical procedures were followed during data collection, analysis, and presentation.

Availability of Data and Materials

The datasets during and/or analysed during the current study are available from the corresponding author upon reasonable request.

Authors' Contributions

This work was carried out in collaboration with all authors. Author KRK designed

the study, wrote the protocol, performed the survey and managed literature, performed the statistical analysis. Author TGR wrote the first draft of the manuscript, and helped in literature searches. Author YY supervised precisely the whole work. All authors read and approved the final manuscript.

Conflicts of Interest

The authors declare that they have no competing interests.

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