


**TOWARDS OPTIMAL PROJECT MANAGEMENT: INFLUENCE OF MONITORING AND EVALUATION PRACTICES ON PROJECT OUTCOMES IN HIV SERVICE PROVISION IN KENYA**

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ARTICLE INFO	ABSTRACT
<p><b>Article history:</b>  <b>Received:</b> May, 24<sup>th</sup> 2024  <b>Accepted:</b> July, 26<sup>th</sup> 2024</p>	<p><b>Objective:</b> Quality healthcare service provision is crucial for achieving Sustainable Development Goal 3 on universal health and well-being. However, a noticeable gap exists in the literature regarding the essential role of Monitoring and Evaluation (M&amp;E) practices in planning, data collection, reporting, and results dissemination of Human Immunodeficiency Virus (HIV) services. The objective was to investigate extent to which the perceptions of healthcare workers influence on M&amp;E practices.</p>
<p><b>Keywords:</b>            Monitoring and Evaluation Practices;            HIV Projects;            Project Management;            Sustainable Development Goals;            Quality Healthcare;            Mixed-Methods Approach;            Program Theory.</p> <div data-bbox="172 1106 480 1352" style="text-align: center;">  </div>	<p><b>Theoretical Framework:</b> The program theory was applied as it provides a framework for planning, implementation, and evaluation of interventions by identifying the pathways through which these outcomes are achieved. A retrospective cross-sectional survey design was used as it leverages complementary methodologies. The high consensus levels highlighted the universality of this perspective within the healthcare community. A moderate positive correlation and a significant relationship between the two variables was observed. Theoretically, it showed how the perceived contribution of M&amp;E offers a conceptual framework for analyzing and evaluating interventions toward project effectiveness.</p> <p><b>Results and Discussion:</b> Variations in healthcare infrastructure, resources, and patient demographics across regions could influence the applicability of the results. The practical, methodological and theoretical implications of this research provide insights into how the results can be applied.</p> <p><b>Research Implications:</b> This study contributes to the literature through practical contributions by identifying progress and challenges throughout the healthcare system to provide.</p> <p><b>Originality/Value:</b> The relevance and value of this research are evidenced by guiding stakeholders, project managers and implementers in improving their M&amp;E systems, allowing for better resource mobilization, and planning, by documenting and replicating successful interventions.</p> <p>Doi: <a href="https://doi.org/10.26668/businessreview/2024.v9i9.4938">https://doi.org/10.26668/businessreview/2024.v9i9.4938</a></p>

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## RUMO AO GERENCIAMENTO IDEAL DE PROJETOS: INFLUÊNCIA DAS PRÁTICAS DE MONITORAMENTO E AVALIAÇÃO SOBRE OS RESULTADOS DO PROJETO NA PRESTAÇÃO DE SERVIÇOS DE HIV NO QUÊNIA

### RESUMO

**Objetivo:** A prestação de serviços de saúde de qualidade é fundamental para atingir o Objetivo de Desenvolvimento Sustentável 3 sobre saúde e bem-estar universais. No entanto, existe uma lacuna notável na literatura em relação ao papel essencial das práticas de monitoramento e avaliação (M&A) no planejamento, coleta de dados, relatórios e divulgação de resultados dos serviços de combate ao vírus da imunodeficiência humana (HIV). O objetivo foi investigar até que ponto as percepções dos profissionais de saúde influenciam as práticas de M&A.

**Estrutura Teórica:** A teoria do programa foi aplicada porque fornece uma estrutura para planejamento, implementação e avaliação de intervenções, identificando os caminhos pelos quais esses resultados são alcançados. Foi usado um projeto de pesquisa transversal retrospectivo, pois ele aproveita metodologias complementares. Os altos níveis de consenso destacaram a universalidade dessa perspectiva na comunidade de saúde. Foi observada uma correlação positiva moderada e uma relação significativa entre as duas variáveis. Teoricamente, foi demonstrado como a contribuição percebida do M&A oferece uma estrutura conceitual para analisar e avaliar intervenções para a eficácia do projeto.

**Resultados e Discussão:** As variações na infraestrutura de saúde, nos recursos e na demografia dos pacientes entre as regiões podem influenciar a aplicabilidade dos resultados. As implicações práticas, metodológicas e teóricas desta pesquisa fornecem percepções sobre como os resultados podem ser aplicados.

**Implicações da Pesquisa:** Este estudo contribui para a literatura por meio de contribuições práticas, identificando o progresso e os desafios em todo o sistema de saúde a ser fornecido.

**Originalidade/Valor:** A relevância e o valor desta pesquisa são evidenciados ao orientar as partes interessadas, os gerentes de projeto e os implementadores a melhorar seus sistemas de M&A, permitindo uma melhor mobilização de recursos e planejamento, documentando e replicando intervenções bem-sucedidas.

**Palavras-chave:** Práticas de Monitoramento e Avaliação, Projetos de HIV, Gerenciamento de Projetos, Objetivos de Desenvolvimento Sustentável, Assistência Médica de Qualidade, Abordagem de Métodos Mistos, Teoria do Programa.

## HACIA UNA GESTIÓN ÓPTIMA DE LOS PROYECTOS: INFLUENCIA DE LAS PRÁCTICAS DE SEGUIMIENTO Y EVALUACIÓN EN LOS RESULTADOS DE LOS PROYECTOS DE PRESTACIÓN DE SERVICIOS DEL VIH EN KENIA

### RESUMEN

**Objetivo:** La prestación de servicios sanitarios de calidad es crucial para alcanzar el Objetivo de Desarrollo Sostenible 3 sobre salud y bienestar universales. Sin embargo, existe un vacío notable en la bibliografía sobre el papel esencial de las prácticas de seguimiento y evaluación (S&E) en la planificación, recopilación de datos, elaboración de informes y difusión de resultados de los servicios relacionados con el virus de la inmunodeficiencia humana (VIH). El objetivo era investigar en qué medida las percepciones de los trabajadores sanitarios influyen en las prácticas de seguimiento y evaluación.

**Marco Teórico:** Se aplicó la teoría de programas, ya que proporciona un marco para la planificación, ejecución y evaluación de intervenciones mediante la identificación de las vías a través de las cuales se logran estos resultados. Se utilizó un diseño de encuesta transversal retrospectiva, ya que aprovecha metodologías complementarias. Los elevados niveles de consenso pusieron de manifiesto la universalidad de esta perspectiva dentro de la comunidad sanitaria. Se observó una correlación positiva moderada y una relación significativa entre las dos variables. Desde el punto de vista teórico, se demostró cómo la contribución percibida del seguimiento y la evaluación ofrece un marco conceptual para analizar y evaluar las intervenciones con vistas a la eficacia de los proyectos.

**Resultados y Discusión:** Las variaciones en la infraestructura sanitaria, los recursos y la demografía de los pacientes entre regiones podrían influir en la aplicabilidad de los resultados. Las implicaciones prácticas, metodológicas y teóricas de esta investigación permiten comprender cómo pueden aplicarse los resultados.

**Implicaciones de la Investigación:** Este estudio contribuye a la literatura a través de contribuciones prácticas mediante la identificación de los avances y desafíos en todo el sistema de salud para proporcionar.

**Originalidad/Valor:** La pertinencia y el valor de esta investigación se ponen de manifiesto al orientar a las partes interesadas, los gestores de proyectos y los ejecutores en la mejora de sus sistemas de seguimiento y evaluación, lo que permite una mejor movilización de recursos, y la planificación, mediante la documentación y replicación de las intervenciones exitosas.

**Palabras clave:** Prácticas de Seguimiento y Evaluación, Proyectos de VIH, Gestión de Proyectos, Objetivos de Desarrollo Sostenible, Atención Sanitaria de Calidad, Enfoque de Métodos Mixtos, Teoría de Programas.

## 1 INTRODUCTION

The effective provision of HIV services extends beyond mere care delivery; it necessitates the implementation of systematic M&E practices. These practices serve as the backbone of program implementation, ensuring accountability and facilitating accurate documentation of progress (Dorshimer et al., 2023). However, a notable gap persists in recognizing the pivotal role of M&E practices which impedes the accurate documentation in tracking the advancements in tracking the attainment of The Joint United Nations Programme on HIV/AIDS (UNAIDS) goals. This study aims to address this gap through a systematic review of related literature.

Global-level studies have shed light on the progress towards achieving HIV-related targets along the continuum of care in the identification of HIV cases 95%, enrolment into Antiretroviral Therapy (ART) of 95% of those identified, and 95% viral suppression of those on therapy – referred to as the 95-95-95 cascade (United Nations Programme on HIV/AIDS, 2020). Reports show that at least 20% of people living with HIV are yet to know their status, and an equal number have not been started on antiretroviral therapy, while 14% of those on antiretroviral therapy are yet to achieve viral load suppression (Marsh et al., 2019). Kenya's HIV prevalence rate among adults stands at 5%, and children account for 139,000 (1%), of the expected 95% suppression rates, the country reported a notably low suppression rate of 48% (Kenya population-based HIV Impact Assessment 2018-2019 (2020)). Owing to the low focus paid to the fundamental role M&E practices play in the tracking of the achievement of the UNAIDS goals of epidemic control, this study contributes to addressing this research gap through a review of related literature.

### 1.1 PROBLEM STATEMENT

M&E reports have highlighted challenges in data management for each of the 95s in the cascade, as projects often focus on implementing one of the three components, leading to a lack of centralized data management, and hindering the ability to measure progress along the continuum (Dorshimer et al., 2023). Additionally, the use of manual systems and the lack of

uniformity in indicators across projects make it challenging to compare outcomes within regions and across different initiatives (Habte et al., 2022), while some the implementers point out that meeting 95% of the targets amid declining resources for HIV is unattainable (Levi et al., 2016). Also, there is limited research on how results dissemination fosters project effectiveness (Etoori et al., 2020).

## 1.2 PURPOSE OF THE STUDY

While previous studies have examined barriers to HIV identification, linkage to ART, and sustained viral load suppression rates, few have systematically compiled empirical evidence on M&E planning, systematic data collection reporting, and sharing of findings (Danforth et al., 2023), which may prevent us from clearly measuring the success made toward meeting the UNAIDS goals. Therefore, this study empirically explores the influence of M&E practices on efficiency and accountability, enhanced project management, and effectiveness of HIV projects through the perceptions of medical practitioners who participated in the study. In summary, this study intends to answer this research question: to what extent do the perceptions of healthcare workers on M&E practices influence the outcomes of HIV projects?

## 2 THEORETICAL FRAMEWORK

This research was grounded in program theory which provides a framework for understanding the rationale, mechanisms, and contextual factors underlying the effectiveness of projects. When linked with Monitoring and Evaluation (M&E) practices in HIV projects, program theory enhances the planning, implementation, and evaluation of interventions aimed at preventing, treating, and controlling HIV/AIDS (Sidani & Sechrest, 1999). When the theory is linked with key M&E practices like M&E planning, it helps in defining the logic by identifying the intended outcomes and the pathways through which these outcomes are expected to be achieved. E.g. changes in behavior related to service uptake observed through testing, enrolment, retention, and sustained viral load suppression rates, the outcome is improved quality of life. This theory guides the selection of appropriate indicators and measurement tools to assess the progress and effectiveness of interventions. This informs the development of M&E plans by specifying the key stakeholders, their roles and responsibilities, and the timelines for data collection, analysis, and reporting.

Program theory provides a framework for synthesizing and interpreting M&E findings in the context of program objectives, assumptions, and mechanisms of change. It guides the development of comprehensive M&E reports that communicate the program's progress, achievements, challenges, and lessons learned to key stakeholders, including funders, policymakers, and program beneficiaries. It helps in identifying and explaining any discrepancies between expected and observed outcomes, facilitating discussions on program modifications or improvements based on evidence-based insights.

In data collection, the theory guides the selection of data collection methods and sources to capture relevant information on inputs, activities, outputs, and outcomes. It ensures that data collection instruments are aligned with the underlying assumptions and causal pathways of the program, allowing for the systematic gathering of evidence, and informs the sampling strategy and sample size determination, ensuring that data collected are representative and reliable for making valid inferences about project effectiveness (Weiss, 1997).

Lastly, program theory informs the dissemination strategy for M&E results, ensuring that findings are communicated effectively to diverse audiences in a transparent and accessible manner by selecting communication channels and formats tailored to the needs and preferences of different stakeholders, including technical reports, policy briefs, presentations, and interactive workshops (Gesicho & Babic, 2021). It also facilitates the translation of M&E results into actionable recommendations for program management and decision-making, fostering a culture of learning, adaptation, and continuous improvement in HIV projects.

In HIV programming, when the theory is linked with M&E practices in HIV projects, it enhances the rigor, relevance, and utility of monitoring and evaluation efforts (Salabarría-Peña & Robinson, 2022). Grounding M&E activities in a clear understanding of program logic and underlying mechanisms of change, organizations strengthen their capacity to assess effectiveness, and accountability, and enhance project management, thereby maximizing the impact of HIV interventions (United Nations Programme on HIV/AIDS, 2020). Therefore, our research study relies on this theory to explain the influence of M&E practices on the outcome of HIV projects.

## 2.1 REVIEWED LITERATURE

Current surveillance studies in epidemic control show that integration of M&E supports systematically collecting and analyzing data on key indicators such as HIV testing rates,

treatment coverage, viral load suppression, and retention in care (Elfaki, 2024) decision-makers can assess the effectiveness of interventions, identify areas for improvement, and allocate resources strategically to maximize impact (Etoori et al., 2020).

These M&E practices have been shown to play a part in the effective implementation and management of HIV projects, encompassing essential activities such as planning, systematic data collection and reporting, and data utilization for informed decision-making, leading to improved efficiency and accountability, enhanced project management and effectiveness of interventions (Habte et al., 2022). M&E planning, managed by the organization's leadership, enhances decision-making processes, identifies areas requiring technical assistance, and improves project monitoring by aligning activities and resources within the work plan (Scheirer, et al., 2017). The process of data collection is of paramount importance in monitoring project indicators and directly influences their quality (Habte et al., 2022). Employing approved data collection methods, determining data collection frequency, and adopting appropriate analysis and presentation techniques enable the tracking of indicators over time, ensuring progress toward desired goals (Salabarría-Peña & Robinson, 2022).

M&E reporting serves as a conduit for relaying feedback to both internal and external stakeholders, including beneficiaries, funders, and governments. Effective reporting not only communicates results to funders and beneficiaries but also minimizes duplication of effort, thereby promoting accountability and facilitating the replication of well-designed projects (Shin et al., 2023). Sharing results with end-users involves thoughtful consideration of the beneficiaries, ensuring that health service delivery stakeholders are engaged in a manner that facilitates informed decision-making. Moreover, M&E provides an institutional framework that describes an organization's operational capabilities (Lavoie et al., 2023). It enhances economic, infrastructural, and human resource capacities necessary for quality service provision and accountability through robust systems in patient care, finances, and procurement. Such systems are particularly crucial in developing countries, where limited resources and inefficient systems pose challenges amid the growing number of clients requiring HIV interventions. To address these challenges, recommendations include strategic planning, adopting modern technologies in data collection and reporting, and fostering partnerships in information sharing to leverage available resources and enhance the overall impact of HIV strategies (The Joint United Nations Programme on HIV/AIDS (UNAIDS) 2020).

## 2.2 CONCEPTUAL FRAMEWORK

The research was anchored on this framework of M&E practices concerning systematic data collection, analysis, and feedback mechanisms throughout the lifecycle of HIV projects. The fundamental role of M&E planning leads to the establishment of clear indicators, data sources, and performance targets, as well as regular assessments of project progress and outcomes. This was measured by the three outcome indicators:

Firstly, efficiency and accountability: M&E practices ensure accountability by tracking the implementation and effectiveness of HIV care programs leading to better resource allocation, program optimization, and ultimately, enhanced service provision and health outcomes. Secondly, the Project effectiveness of M&E activities in achieving program objectives contributes to improved project outcomes and progress toward ending the HIV epidemic. Thirdly, Enhanced project management via the integration of effective M&E practices into strategic plans to enhance project management by providing timely feedback, identifying areas for improvement, and facilitating evidence-based decision-making. These reflect the success of the interventions in effectively managing and controlling the epidemic in the population and provide valuable insights into the factors that influence the success of these projects.

## 3 METHODOLOGY

### 3.1 SAMPLE AND PROCEDURE

In this study, the researcher only engaged participants who consented to be a part of the study through voluntary participation. The virtual platform was deemed suitable to collect data from a wide range of health facility staff: clinical officers, nurses, HIV testing services counselors, health records and information officers, and laboratory and pharmacy technologists. Only clinics with these cadres were allowed to participate in the study.

A pragmatic research paradigm was applied as it adopts many approaches a mixed methods for its complementary attributes and applicability (Wambugu et al., 2015). We applied a cross-sectional descriptive survey design as deemed suitable in a mixed methods approach. We gathered quantitative data targeting 226 healthcare workers using a Google Form in February 2022, after which 203 questionnaires were returned resulting in a response rate of 89.8%. Further, the researchers gathered qualitative data from the program support staff using

Key Informant Interviews (KIIs). Non-response bias was handled by sending emails and short message services (SMS) to respondents reminding them of the confidentiality of their information, and reiterating the value of their feedback in improving service delivery processes.

### 3.2 QUESTIONNAIRE AND KEY INFORMANT INTERVIEWS DESIGN AND MEASURES

In the questionnaire, the first section contained informed consent and voluntary participation in the study. The second section had questions on the demographic characteristics of the respondents, while the third part contained a 5-point Likert scale ranging from Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), and Strongly Agree (5). Likert scale questions were applied to measure a single variable, and the scale was treated as an interval measurement scale to gather continuous data following the methodology outlined (Brown, 2011). For the collection of qualitative data, the researcher used purposive sampling to conduct 10 interviews from the sub-county and project teams as they coordinate and supervise health facilities staff. The researcher used a KII schedule containing open-ended questions to gather in-depth information, and the introduction section contained informed consent and voluntary participation. Since this was a health-related study, the researcher obtained a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI) to validate the findings of the study.

### 3.3 DATA ANALYSIS TECHNIQUES

We analyzed data using SPSS software version 27. We used descriptive analysis to generate frequencies and percentages, mean as a measure of central tendency, standard deviation to measure variability, One-Way ANOVA for mean differences, correlation analysis to test the direction and strength of the relationship between M&E practices and project outcomes, regression analysis to test the significance of the influence of the independent variable on the dependent variables at a  $p$ -value  $\leq 0.05$  level of significance. For qualitative data, we examined the data to identify patterns and themes via transcription of the audio recordings into written text to create a textual dataset, followed by labeling segments of the data with meaningful codes that captured the key ideas. We analyzed this to identify common



patterns and themes that reflected the participants' perspectives and experiences, and lastly, interpretation to provide underlying meanings about the research questions.

### 3.4 RELIABILITY AND VALIDITY ANALYSIS

During the pilot study, a sample of 23 responses analysis which constituted 10% of the total intended sample size of 226 respondents was deemed suitable by the researcher. The researcher used Cronbach's (1951) reliability coefficient to assess the internal consistency of the questionnaire using average correlation among items in the instrument ranging between 0 and 1, where a coefficient closer to 1.0 indicated higher internal consistency of the items. The result was 0.7, indicating a high internal consistency and reliability of the instrument. In terms of qualitative data, the researcher used rich and thick verbatim quotations provided descriptive accounts from the respondents, supporting the findings derived from the KIIs which enhanced the transparency and credibility.

For the quantitative data, input from experts in HIV programming was used to ensure that the questions adequately addressed the research questions. In the case of qualitative data, we used triangulation using facilitators from different health facilities and different study locations using the same tools. Consistency in results provided additional evidence of validity, thereby enhancing the credibility of the study (Creswell, 2014).

### 3.5 NORMALITY TEST

The study tested for normality of data using the Shapiro and Wilk test (1965) as one of the assumptions of linear regression analysis as recommended for small samples. This is based on the assumption that when  $W$  statistic is near to or is equal to one (1), then it is assumed that the data presented is perfectly normal. The  $W$  statistics for the variable Monitoring and Evaluation Practices (0.958) were normally considered as the values were close to (1), hence descriptive and inferential statistics could be performed on the data.

## 4 RESULTS AND DISCUSSIONS

### 4.1 DEMOGRAPHIC INFORMATION OF RESPONDENTS

A response rate of 90% (203) was realized from the 226 questionnaires, and this was attributed to the use of efficient modern technology and the respondents' ability to embrace technological advances in data collection and reporting.

### 4.2 RESPONDENT PERCEPTIONS OF M&E PRACTICES

Data was aggregated from 12 statements and a 5-point Likert scale was used to categorize the responses under these themes M&E planning, data collection, reporting, and results dissemination. Responses from the 12 statements were summed up based on each of the five categories in the Likert scale and reported descriptively. The results of healthcare worker's perceptions on the influence of M&E practices in the outcomes of HIV projects showed the majority 107(52.7) strongly agreed with the statements, 91(44.8%) agreed, 5 (2.5%) were neutral, while none 0 (0%) the respondents neither strongly disagreed nor disagreed with the statements put across regarding HIV projects. This is supported by empirical research highlighting the improved outcomes after using electronic medical records' ability to handle the challenges experienced while managing clients' data under the new WHO patient care protocols and stakeholder interests (Adu-Gyamfi et al., 2019). This is illustrated in Table 1.

**Table 1**

*Respondent Perceptions of M&E Practices*

Category	Interval Scale	n(203)	%
Strongly Disagree	12-21	0	0.0
Disagree	22-31	0	0.0
Neutral	32-41	5	2.5
Agree	42-51	91	44.8
Strongly Agree	52-61	107	52.7

N = number of individuals;

Source: Nairobi County Health Department; Integrated Human Resource Information System (HRIS), (2021).

Descriptive statistics were performed to assess the relationship between M&E practices and HIV Project outcomes, and the means and standard deviations are presented. Results indicated that comparison in the means between these three categories; strongly agree (48.96), agree (47.32), and neutral (40.00), shows that those strongly agreeing performed better than the

last two groups. Further, Post Hoc analysis on the comparison of the performance between the three groups, showed there was no significant difference in the three categories of respondents ( $p < 0.05$ ). These are key in developing countries with limited resources compounded by inefficient systems, and ever-growing numbers of clients from these HIV strategies (Kalbarczyk et al., 2019). This is shown in Table 2.

**Table 2**

*Descriptives for M&E Practices and Project Outcomes*

	N	M	SD	SE	95% CI for Mean		Minimum	Maximum
					LB	UB		
Neutral	5	40.0	1.41	0.63	38.24	41.76	39.00	42.00
Agree	91	47.3	3.82	0.400	46.52	48.11	40.00	60.00
Strongly Agree	107	48.9	5.42	0.52	47.92	50.00	35.00	60.00
Total	203	48.0	4.92	0.35	47.32	48.70	35.00	60.00

N = number of individuals; M=Mean; SD=Standard Deviation; SE=Standard Error; LB=Lower Bound; UB=Upper Bound

Source: Nairobi County Health Department; Integrated Human Resource Information System (HRIS), (2021).

The ANOVA was significant at .05 level,  $F(2, 47) = 10.42, p = .000$ . The F-calculated (10.416) was significantly larger than the critical value of F (3.89), reject the null hypothesis inferring that there was a significant relationship. See illustration in Table 3.

**Table 3**

*One-way ANOVA Analysis Between and Within Groups*

Factor	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	416.386	2	230.693	10.416	0.000
Within Groups	4429.995	200	22.148		
Total	4890.995	202			

d.f = degrees of freedom; F = F-Statistic; Sig = Significance

Source: Nairobi County Health Department; Integrated Human Resource Information System (HRIS), (2021).

Post Hoc Tukey HSD test indicated no significant difference between the category of respondents who agreed ( $p = .002$ ) and those who strongly agreed ( $p = .000$ ). Also, there was no significant difference between respondents in the strongly agree category who had a neutral opinion ( $p = .000$ ) and those who agreed ( $p = 0.04$ ). Table 4 shows the details.

**Table 4**

*Tukey HSD Post Hoc Tests for Multiple Comparisons*

Category	Category	Mean Difference (I-J)	Std. Error	Sig.	95% CI	
					Lower Bound	Upper Bound
Neutral	Agree	-7.31868*	2.16171	0.002	-12.423	-2.2142
	Strongly Agree	-8.96262*	2.15328	0.000	-14.047	-3.8781
Agree	Neutral	7.31868*	2.16171	0.002	2.2142	12.4231
	Strongly Agree	-1.64394*	0.6711	0.04	-3.2286	-0.0593
Strongly Agree	Neutral	8.96262*	2.15328	0.000	3.8781	14.0471
Agree	Agree	1.64394*	0.6711	0.04	0.0593	3.2286

\*. The mean difference is significant at the 0.05 level; Std. Error = Standard Error; Confidence Interval  
 Source: Nairobi County Health Department; Integrated Human Resource Information System (HRIS), (2021).

The correlation between M&E practices and project outcomes was measured using a 12-item scale is .36 and significant ( $p < .05$ ), meaning that based on the perceptions of the respondents, project outcomes are likely to improve with an increase in the utilization of M&E practices. This is shown in Table 5.

**Table 5**

*Correlation between M&E Practices and Project Outcomes*

	M&E Practices	Project Outcomes
M&E Practices	.0	
Project Outcomes	.36**	.0

\*\* Correlation is significant at the 0.05 level (2-tailed)  
 Source: Nairobi County Health Department; Integrated Human Resource Information System (HRIS), (2021).

Simple linear regression showed that M&E practices predicted project outcomes ( $\beta = .36, p < .000$ ), thus the hypothesis was supported. The regression model explained the statistically significant relationship between the two variables and the goodness of fit of the model ( $p < .000$ ). The results support the fifth hypothesis' overall model summary was ( $R=0.358$ ),  $R^2=0.128$ , adjusted  $R^2=0.124$ ,  $F(1,201) = 29.598, p=0.000 \leq 0.05$ ) was explained by the constant coefficient (30.367) indicating the expected value of HIV project performance when all predictor variables were constant. The beta coefficient (0.358) signified the change in one unit in M&E practices, increased project performance by 35.8 units. The t-value (5.440) suggested that the coefficient for the services holds statistical significance ( $p\text{-value}=0.000 \leq 0.05$ ), therefore, the null hypothesis was rejected, and concluded that M&E Practices had a significant relationship on performance of HIV projects in Nairobi County.

These findings concur with previous studies that show that M&E practices are key in the understanding of the HIV epidemic as they aid in tracking trends over time crucial to inform public health interventions and policies. It’s a practice that once included in the programming, helps in the design as it communicates results, promotes accountability, promotes continuous learning, and improves the eradication of HIV (Dery et al., 2023). The illustration is in Table 6.

**Table 6**

*Regression Coefficients of M&E Practices and HIV Project Outcomes among healthcare workers*

Variable	Beta	SE	95% CI		$\beta$	p-value
			LL	UL		
Project Outcomes	30.37	3.26	23.94	36.79		.00
M&E Practices	.34	.06	.22	.46	.36	.00

Note: p<.05; SE = Standard Error; LL = Lower Limit, UL = Upper Limit,  $\beta$  = Beta

Source: Nairobi County Health Department; Integrated Human Resource Information System (HRIS), (2021).

### 4.3 QUALITATIVE RESULTS

In response to the achievement of the 95-95-95 targets, respondents from the key informant interviews had this to say:

On the contribution of PNS in the identification of HIV-positive persons, a key informant had this to say, “these targets are realistic as they guide programming. The achievement of the first 95 targets is now feasible, the assisted Partner Notification Services (aPNS) strategy has led to the prudent use of resources through M&E planning... we need checks and balances to show us where we need to improve on”. Anonymous informant number 3.

In regards to meeting the HIV control targets by the year 2030, a respondent had this to say, “We are on track with the first 95, as it lays the foundation for the other targets. The second 95 is excellent as putting clients on ART has no major challenges as same-day treatment is generally accepted by clients... the third 95 continues to improve as those enrolled on ART are virally suppressed as a result of adherence to therapy. Thanks to our M&E systems we can tell how far we need to go”. Coordinator 1.

Further, a respondent had this to say on the utilization of data for targeted interventions, “Our M&E reports there is a challenge in suppression rates for children and adolescents because the drugs are not child-friendly and late disclosure as they rely on caregivers...the transition of

childhood to adolescence, especially for learners, needs to be addressed as most face stigma in schools which affects adherence”. Respondent number 1 said.

Regarding support from the Ministry of Health regarding M&E support to health facilities, a participant reported, “The main success of this project is goodwill received from the National AIDS and STI Control Program (NAS COP) which means that programming is well taken care of through data sharing forums which informs policies and guidelines”. Respondent number 4 said.

Lastly, a respondent reported this on health systems support, “it is through information use that service uptake barriers like commodity stock-outs are addressed. We need partnerships with the private sector and government commitment to investment because donor dependency is up to 90% and is not sustainable”. Sub-county coordinator 2.

## **5 DISCUSSION**

The strong consensus is a show of the respondents’ willingness to participate in the study and share their perspectives regarding M&E for HIV projects is a noteworthy observation. The hypothesis is supported ( $\beta = .36, p < .000$ ) and there is a statistically significant relationship is an indication that healthcare workers are generally acknowledging the critical role of M&E practices, highlighting the universality of this perspective within the healthcare community. Further, the theory demonstrates that M&E practices foster stakeholder engagement and collaboration by involving key stakeholders throughout the processes, which can ensure that programs are responsive to the needs and priorities of the communities they serve.

## **6 STUDY LIMITATIONS**

**Sampling Bias:** The study's focus on healthcare workers in Nairobi County's HIV clinics may limit the generalizability of the findings to other settings or populations. Variations in healthcare infrastructure, resources, and patient demographics across different regions could influence the applicability of the results.

**Self-Report Bias:** The study relied on self-reported data through a virtual medium may introduce bias, as participants may have provided socially desirable responses, impacting the accuracy and reliability of the reported outcomes.

Cross-Sectional Design: This may have the ability to establish causality or infer long-term trends. While the study has provided valuable insights into the current status, longitudinal research would be needed to assess changes over time and determine the sustainability of the observations.

## **7 CONCLUSION**

The conclusion of an article should summarize the main findings of the study succinctly, highlighting the significant contributions to the research field. It should reiterate the objectives of the study and summarize the most important findings, emphasizing their relevance and practical or theoretical implications.

In this paper, we assess the influence of these four M&E practices) planning, data collection, reporting, and results dissemination) on HIV project outcomes (accountability and efficiency, project effectiveness, and enhanced project management). The program management theory, tells that M&E practices have a significant influence on HIV projects. These findings concur with previous studies that show that M&E practices are key in the understanding of the HIV epidemic as they aid in tracking trends over time crucial to inform public health interventions and policies (Dery et al., 2023). It's a practice that once included in the programming, helps in the design as it communicates results, promotes accountability, promotes continuous learning, and improves the eradication of HIV (Elfaki, 2024).

## **8 IMPLICATIONS**

Theoretically, the study has implications for causal processes and treatment mechanisms in that researchers and practitioners can pinpoint intervention components that are most effective in achieving desired outcomes toward enhanced project management. Practically, by identifying areas for improvement and implementing evidence-based interventions, the positive influence of M&E on HIV projects helps healthcare providers enhance the quality of services delivered leading to improved accountability. The methodological implication of using statistical methods to identify patterns, trends, and correlations between M&E practices and project outcomes is paramount, as it derives meaningful insights and makes informed decisions to drive improvements in service delivery.

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