

# **Influence Of Human Capacity for Monitoring And Evaluation Systems on Provision of Health Care Services In Public Health Institutions in Migori County**

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**Abstract:** Provision of health services in hospitals lack priority that it should enjoy in terms of monitoring and evaluation. Developed countries have pursued results orientated development initiatives by adopting more effective monitoring and evaluation practices in health care services provision. Monitoring and Evaluation systems allow project activities to be measured and analyzed. The purpose of the study was to establish the influence of Monitoring & Evaluation human capacity on the provision of health care services in Public Health Institutions in Migori County, Kenya. The research design used was descriptive survey. The study targeted a sample of 60 doctors, 102 Nurses, 43 M&E officers, 9 social workers, 16 community health volunteers and 55 patients. The data collection instruments included a questionnaire and an interview guide. Data analysis was descriptive in the form of frequencies and percentage. Multiple regression was conducted. From the study findings, data collection was regular with data analysis carried mainly through SPSS21. The study found out that technical support increased the knowledge on monitoring and evaluation systems to a moderate extent as indicated by a mean of 3.37 and standard deviation of 0.1. The study concluded that capacity building on Monitoring & Evaluation increased access on provision of health services to a moderate extent. Technical support increased the knowledge on monitoring and evaluation systems to a moderate extent. The study recommends that the public health institution management should offer technical support to the personnel. This would help to increase the knowledge on monitoring and evaluation systems.

**Key words:** Monitoring and Evaluation Systems; Human Capacity, Healthcare Services

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## **I. Introduction**

Monitoring is an ongoing function that employs the systematic collection of data related to specified indicators in Public projects. Monitoring and evaluation is a tool in project management. Project management is possibly the second oldest profession (Ballard, 2013). Monitoring and evaluation (M&E) is described as a process that assists project managers in improving performance and achieving results (Agutu, 2014). The goal of M&E is to improve current and future management of outputs, outcomes and impact (United Nations Development Programme, 2015). Williams (2014) asserts that monitoring provides management and the main stakeholders of a development intervention with indications of the extent of progress and achievement of expected results and progress with respect to the use of allocated funds. Monitoring provides essential inputs for evaluation and therefore constitutes part of the overall evaluation procedure. Evaluation is an organised and objective assessment of an ongoing or concluded policy, program/project, its design, execution and results. The aim is to provide timely assessments of the relevance, efficiency, effectiveness, impact and sustainability of interventions and overall progress against original objectives. According to Ballard (2013), monitoring and evaluation is a process that helps program implementers make informed decisions regarding program operations, service delivery and program effectiveness, using objective evidence.

Understanding the skills needed and the capacity of people involved in the M&E system (undertaking human capacity assessments) and addressing capacity gaps (through structured capacity development programs) is at the heart of the M&E system (Gorgens&Kusek, 2013). The lack of capacity in low-income countries is one of the main constraints to achieving the Millennium Development Goals. Even practitioners confess to having only a limited understanding of how capacity actually develop (Gorgens&Kusek, 2013). Building an adequate supply of human resource capacity is critical for the sustainability of the M&E system and generally is an ongoing issue. Furthermore, it needs to be recognized that “growing” evaluators requires far more technically oriented M&E training and development than can usually be obtained with one or two

workshops. Both formal training and on-the-job experience are important in developing evaluators with various options for training and development opportunities which include: the public sector, the private sector, universities, professional associations, job assignment, and mentoring programs (Acevedo et al., 2010).

Regardless of how experienced individual members are, once a team to implement a project has been identified, training and capacity building for M&E reporting is important. This, it has been observed, enhances understanding of the project deliverables, reporting requirements and builds the team together (Wysocki&McGary, 2013). Generally, everybody involved in project implementation is also involved in the implementation of M&E, including partners, and should receive training (Acharya et al, 2016). Training of implementers in M&E is deliberately participatory to ensure that those responsible for implementing and using the system are familiar with its design, intent, focus, and how to use the M&E tools.

Health planners and managers are concerned with capacity because it enables performance. For example, a health facility that experiences regular stock-outs of pharmaceuticals might require additional capacity in financial planning or supplies management. It follows that a capacity development strategy for improving pharmaceutical supply would call for a different approach than one aimed at strengthening community involvement in health. The link between capacity and performance, therefore, serves as the guide for both programming and evaluation of capacity-building interventions. Improved performance, in turn, is a good indicator of success in capacity development (Gorgens&Kusek, 2013).

In assessment of quality provision of Health care in the Nepal, UNDP (2015) discusses some of the challenges of organizational development as having inadequate monitoring and evaluation systems. Additionally, the lack of capabilities and opportunities to train staff in technical skills in this area is clearly a factor to be considered. During the consultation processes, there was consensus that their lack of monitoring and evaluation mechanisms and skills was a major systemic gap across the region (Adan, 2013). Furthermore, while there is no need for CSOs to possess extraordinarily complex monitoring and evaluation systems, there is certainly a need for them to possess a rudimentary knowledge of, and ability to utilize reporting, monitoring, and evaluating systems. There is a constant demand for training in planning, monitoring, review, evaluation and impact assessment for both program staff and partners in projects (Gosling & Edwards, 2013).

Skills for numeracy, literacy, interviewing and monitoring in qualitative and quantitative methods, for management information systems are necessary for participatory monitoring and evaluation (Adan, 2013). Staff need to be trained not only on collecting descriptive information about a health program, product, or any other entity but also on using something called “values” to determine what information and to draw explicitly evaluation inferences from the data, that is inferences that say something about the quality, value or importance of something (Davidson, 2014). Players in the field of project management like project and programme managers, M and E officers, project staff and external evaluators will require specialized training not just in project management and M and E; but specifically in areas like Participatory monitoring and evaluation and results based monitoring and evaluation (Murunga, 2015).

## **II. Objective of the Study**

This study sought to determine the extent to which human capacity for Monitoring and Evaluation influence provision of health care services in public health institutions in Migori County, Kenya.

## **III. Literature Review**

Monitoring and evaluation (M&E) are tools employed to assess the relationships of intentions versus actions, actions versus outcomes, and outcomes versus impacts. However, the most important, yet quite often the most neglected aspect of monitoring and evaluation is feedback. It is the feedback of lessons learned through M&E that assists correction of current mistakes and improvement of future decisions (Khan, 2010). A results-based M&E system is essentially a feedback system; it is a management tool to measure and evaluate outcomes, providing information for governance and decision making (Gorgens&Kusek, 2010). A results-based system, whilst not neglecting the monitoring of inputs and outputs, attaches the highest importance to providing feedback on results at the level of outcomes and goals (Edmunds & Marchant, 2010).

The objective of wellbeing administrations arrangement is to enhance wellbeing results in the populace and to react to individuals' desires while decreasing imbalances in both wellbeing and responsiveness (Houtzager, 2013). The social insurance needs of the populace ought to be met with the ideal amount and nature of administrations created at least expenses. Sorts of contributions to wellbeing administration arrangement largely decide conveyance of the administrations. The authoritative structure and procedures decide amount and nature of yields for a given amount of information sources. The amount and nature of administrations and their circulation, together with other wellbeing framework and non-wellbeing framework factors decide how much wellbeing increase can be accomplished in the general public (Aiken, 2015). The appraisal of supplier execution can illuminate approach choice with the proof on the normal or the

genuine commitment of suppliers' expert activities into the accomplishment of the middle of the road and last objectives of wellbeing frameworks (WHO, 2015).

The M&E system function with skilled people who effectively execute the M&E tasks for which they are responsible. Therefore, understanding the skills needed and the capacity of people involved in the M&E system (undertaking human capacity assessments) and addressing capacity gaps (through structured capacity development programs) is at the heart of the M&E system (Gorgens&Kusek, 2010). In its framework for a functional M&E system, UNAIDS (2010) notes that, not only is it necessary to have dedicated and adequate numbers of M&E staff, it is essential for this staff to have the right skills for the work. Moreover, M&E human capacity building requires a wide range of activities, including formal training, in-service training, mentorship, coaching and internships. Lastly, M&E capacity building should focus not only on the technical aspects of M&E, but also address skills in leadership, financial management, facilitation, supervision, advocacy and communication. Building an adequate supply of human resource capacity is critical for the sustainability of the M&E system and generally is an ongoing issue. Furthermore, it needs to be recognized that "growing" evaluators requires far more technically oriented M&E training and development than can usually be obtained with one or two workshops. Both formal training and on-the-job experience are important in developing evaluators with various options for training and development opportunities which include: the public sector, the private sector, universities, professional associations, job assignment, and mentoring programs (Acevedo et al., 2010). Monitoring and evaluation carried out by untrained and inexperienced people is bound to be time consuming, costly and the results generated could be impractical and irrelevant. Therefore, this will definitely affect the success of projects (Nabris, 2012). In assessment of CSOs in the Pacific, UNDP (2011) discusses some of the challenges of organizational development as having inadequate monitoring and evaluation systems. Additionally, the lack of capabilities and opportunities to train staff in technical skills in this area is clearly a factor to be considered. During the consultation processes, there was consensus among CSOs that their lack of monitoring and evaluation mechanisms and skills was a major systemic gap across the region. Furthermore, while there is no need for CSOs to possess extraordinarily complex monitoring and evaluation systems, there is certainly a need for them to possess a rudimentary knowledge of, and ability to utilize reporting, monitoring, and evaluating systems (Gala, 2011).

There is a constant demand for training in planning, monitoring, review, evaluation and impact assessment for both program staff and partners in projects (Gosling & Edwards, 2013). Skills for numeracy, literacy, interviewing and monitoring in qualitative and quantitative methods, for management information systems are necessary for participatory monitoring and evaluation (Adan, 2012). Staff need to be trained not only on collecting descriptive information about a program, product, or any other entity but also on using something called "values" to determine what information and to draw explicitly evaluation inferences from the data, that is inferences that say something about the quality, value or importance of something (Davidson, 2014). Players in the field of project management like project and programme managers, M and E officers, project staff and external evaluators will require specialized training not just in project management and M and E; but specifically in areas like Participatory monitoring and evaluation and results based monitoring and evaluation (Murunga, 2011). In a study by White (2013) on monitoring and evaluation best practices in development health facilities, indicate that health facilities encounter a number of challenges when implementing or managing M&E activities one being insufficient M&E capacity where M&E staff usually advises more than one project at a time, and have a regional or sectoral assignment with a vast portfolio. Furthermore, taking on the M&E work of too many individual projects overextends limited M&E capacity and leads to rapid burnout of M&E staff whereby high burnout and turnover rates make recruitment of skilled M&E staff difficult, and limits the organizational expertise available to support M&E development. Mibey (2011) study on factors affecting implementation of monitoring and evaluation programs in kazikwakijana project, recommends that capacity building should be added as a major component of the project across the country (Kenya), and this calls for enhanced investment in training and human resource development in the crucial technical area of monitoring and evaluation.

In a study conducted in USA, Chicago health center, it indicated that the M&E system cannot function without skilled people who effectively execute the M&E tasks for which they are responsible. Therefore, understanding the skills needed and the capacity of people involved in the M&E system (undertaking human capacity assessments) and addressing 12 capacity gaps (through structured capacity development programs) is at the heart of the M&E system (Gorgens&Kusek, 2010). In its framework for a functional M&E system, UNAIDS (2010) notes that, not only is it necessary to have dedicated and adequate numbers of M&E staff, it is essential for this staff to have the right skills for the work.

In US showed that a higher level of staffing with RNs per patient day was associated with decreased rates of unplanned extubation, hospital-acquired (Arcury, 2017). A prior cross-sectional investigation of information from 10,184 attendants, and 232,342 patients experiencing general, orthopedic and vascular surgery in 168 hospitals in the United States of America found that an extra patient for every medical caretaker was

related with an expansion in both the hazard balanced 30-day mortality and the inability to-protect rate of 7 %. Systematic review of 43 studies in the Western Europe found that richer nurse staffing was related to lower failure-to rescue rates among surgical patients and lower inpatient mortality rates and shorter hospital stays among medical patients (Vanessa, 2017). A systematic review and meta-analysis of 28 studies attempted to stratify the effect of nurse staffing by clinical setting and observation of incidences of pneumonia, respiratory failure, and cardiac arrest in intensive care units patients; lower failure-to-rescue rates in surgical patients; and a shorter duration of hospital stay in both intensive care and surgical patients were observed (Aiken, 2010).

In a study done in Mali, Guinea and Nigeria by WHO (2013) in public health centers, indicated that human Capacity can be perceived as a moving target. It often develops in stages that indicate improved readiness to influence performance (Goodman et al., 2013). Capacity building, therefore, is an ongoing process (the development of abilities), whose stages can be measured as “development outcomes”. The study used a descriptive survey design on monitoring and evaluation. The dynamic nature of capacity is often a reflection of the many different forces that influence its development or decline (UNAIDS, 2010).

Another study done by, Sierra Leone’s Ministry of Health (MOH) indicated that they might have the capacity to deliver childhood immunization services. However, frequent political instability in the country can challenge that capacity and reduce performance (e.g., immunization coverage) dramatically. Taking a more general example, the stagnation and decline of economic growth that occurred in Africa in the 1980s severely undermined public sector capacity to meet recurrent costs for salaries and supply of basic health commodities. Even well-established health systems, such as Ghana’s, were unable to withstand the decline (Burgon, 2016).

In a study done in Kenya on human capacity by White (2013) on monitoring and evaluation best practices in development, indicate that health institutions encounter a number of challenges when implementing or managing M&E activities one being insufficient M&E capacity where M&E staff usually advises more than one project at a time, and have a regional or sectorial assignment with a vast portfolio. Furthermore, taking on the M&E work of too many individual projects overextends limited M&E capacity and leads to rapid burnout of M&E staff whereby high burnout and turnover rates make recruitment of skilled M&E staff difficult, and limits the organizational expertise available to support M&E development (Ramesh, 2002). Mibey (2011) study on factors affecting implementation of monitoring and evaluation programs in *kazikwakijana* project, recommends that capacity building should be added as a major component of the project across the country (Kenya), and this calls for enhanced investment in training and human resource development in the crucial technical area of monitoring and evaluation.

#### **IV. Methodology**

This study employed a descriptive survey research design. Descriptive research design is used to describe an event or phenomena as it exists at present and is appropriate when the study is concerned in specific predictions, narrative of facts and characteristics concerning individuals or situations (Kothari, 2003). Enlightening review study plans are applied as part of preparatory and exploratory investigations to allow scientists to bring together facts, condense, show off and decipher with the stop aim of elucidation (Orodho, 2002). The purpose for engaging review inquire approximately outline is to look at, depict and record elements of a circumstance as it generally happens (Polit and Beck, 2008). Clear studies are fitting since it consists of watching and depicting the behavior of a subject without affecting it in any capability (Martyn, 2008). It is utilized to check demeanors and feelings approximately events, people or method.

The study targeted all the 80 M&E officers, 159 doctors, 500 nurses, 37 Community health volunteers, 21 social workers and 200 patients who visits the hospital within an hour. This study focused on eight sub county hospitals and one referral hospital. Which includes; Migori county referral hospital. Awendo, Isibania, Karungu, Macalder, Ntimaru, Othoro, Rongo and Kuria sub county hospitals. Hair, (2003) defines population as an identifiable total group or aggregation of elements (people) that are of interest to a researcher and pertinent to the specified information problem. According to Salkind (2008), population is the entire of some groups. This is also supported by Sekaran and Bougie (2010). Population is defined as entire group of people the researchers want to investigate.

This sample size sought to introduce the simple random sampling which was used in this study. This research used Yamane (1967) formula of sample selection to generate a sample size for the study:

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

Where: n = Sample size

N = Target Population (997)

e = Error = 0.05

whence, n= 997/ (1 + 997 (0.05)<sup>2</sup>)

**n = 285**

The study size therefore constituted 285 respondents (60 doctors+ 43 M&E officers + 102 Nurses +9 social workers +16 community health workers + 55 patients) who were randomly picked.

The sampling technique used was simple random sampling. Every third item from the population was picked randomly. Yin (2013) argues that the sample size depends on what one wants to know, what is at stake and recommends 10-30% as an appropriate sample in a case study.

The research instruments that were used in the study were questionnaires and interviews. In developing the questionnaire items, the fixed choice of the item was used. A questionnaire was used to gather primary data. Patton (2014) argued that the advantages of using questionnaires are that information can be collected from a large sample. The use of more than one method for gathering data was to ensure methodological triangulation as distinguished by Denzin (Alan, 2003). The questionnaire consists of items applying the likert scale with the responses ranging from strongly agree, agree, not sure, disagree and strongly disagree on a 1,2,3,4,5 rating scale. The questionnaire consisted of both open- ended and closed ended questions to offer opportunities for comments, suggestions and areas of improvement that would make a positive difference when using monitoring and evaluation systems.

However, in the fixed choice item, it involves “putting words” in the respondents’ mouth, especially when providing acceptable answers, there is temptation to avoid serious thinking on the part of the respondent. To avoid such situations, the researcher provided respondent friendly questions to keep him/her comfortable. Interview schedules were for the patients and were used to solicit for more information that might not be captured by the questionnaire.

The researcher administered questionnaires and wait for the respondents to fill. The researcher sought approval for this study from the University of Nairobi. As soon as permission is granted and the researcher obtains an introduction letter, the researcher will collect data. The study proceeded in the following chronology: recruitment of one research assistant; conducting briefing for the assistant on the study objectives, data collection process and study instrument administration; reproduction of required copies for data collection; assessment of filled questionnaires through serialization and coding for analysis; data analysis and discussion; preparation of the conclusion and recommendations.

The questionnaires were checked for completeness and consistency of information at the end of every field data collection day and before storage. Data capturing was done using Excel software. The data from the completed questionnaires and interviews was cleaned, re-coded and entered into the computer for analysis to produce frequency tables, graphs, and the necessary measures of variances for interpretation. Descriptive statistics (that is frequency analysis) was computed for presenting and analyzing the data. Descriptive statistics enables the researcher to describe the aggregation of raw data in numerical term (Mugenda&Mugenda, 2013). Data was analyzed using correlation and regression analysis. The relationship between independent variables was measured through multiple regression analysis, in order to find out the inter-relationship between the four independent variables and their influence on the dependent variable (Sharma, 2005). In addition, frequency distributions and percentage tables was used. Data will be presented in the form of frequency distribution tables that facilitated description and explanation of the study findings.

## V. Study Findings

### Demographic Information of the Respondents

The study sought to determine the demographic characteristics of the respondents as they are considered as categorical variables which give some basic insight about the respondents. The characteristics considered in the study were; range of ages of the respondents; gender and highest level of education attained by the respondents.

### Distribution of Respondents by their Gender

The study was interested in knowing the gender of the respondents because it helped to understand the category of the people working in provision of health services by gender thus the respondents were asked to state their gender. Results are presented in Table 1.

**Table 1: Gender of the Respondents**

Gender	Frequency	Percent
Female	136	61.8
Male	84	38.2
<b>Total</b>	<b>220</b>	<b>100</b>

The results in Table 1 show that 136 (61.8%) respondents were females while 84 (38.2%) were male. This implies that the population of women working at the hospitals was higher than that for men. The findings indicate that the hospitals employed more female than male which means there is no discrimination on the side

of female. This is in line with the constitution of Kenya (2010) which requires that in any employer situation there should be a third of either gender. This meets the threshold.

### **Distribution of Respondents by their Age Bracket**

The study was interested in knowing the age bracket of the respondents because the age factor was important since the government is trying to encourage the youth to apply for jobs in the country. The respondents were asked to state their age bracket. The results are presented in Table 2.

**Table 2: Age Bracket of the Respondents**

Age bracket	Frequency	Percent
18-35	26	11.8
36-45	137	62.3
46-59	57	25.9
<b>Total</b>	<b>220</b>	<b>100</b>

From the Table 2, the findings shows that, 137 (62.3%) of the respondents were between 36 - 45 years of age, 46 - 59 years were 57 (25.9%), while 26 (11.8%) were 18 - 35 years. This implies that majority of the health workers providing health services were below 45 years of age 163 (74.1%) are younger falling within the age of 18-45 years who are energetic and expected to be innovative and may provide better health care services to the public institutions. This would enhance better health care in the facility and are for change of new technology.

### **Distribution of Respondents by their Level of Education**

The study wanted to know the level of education of the respondents because it is believed that the higher the level of education the better the quality of health care provision. The respondents were asked to state their level of education. The results are presented in Table 3.

**Table 3: Highest Education Level of the Respondents**

	Frequency	Percent
Certificate	15	6.8
Diploma	106	48.2
University degree	67	30.5
Master Degree	32	14.5
<b>Total</b>	<b>220</b>	<b>100</b>

From Table 3, out of the 220 respondents who participated in the study, 106 (48.2%) of the respondents had attained Diploma education, 67 (30.5%) had a University degree, 32 (14.5%) had attained a Master degree, and 15(6.8%) had attained certificate. These findings show that the majority of health providers 205 (93.2%) have the required qualifications in health provision and it is therefore expected that provision of health care services in public health institutions in Migori county is expected to be better and if there is poor provision of health care services there is something else influencing other than education.

### **Human Capacity for Monitoring and Evaluation and Provision of Health Care Services**

The objective that the study wanted to achieve was to determine the extent to which human capacity for M&E influence provision of health care services in public health institutions in Migori County, Kenya. To achieve this objective, the respondents were asked to give their opinions on the level of agreement or disagreement with the statements provided in a likert scale of 1-5 where 1=Not at all, 2= little extent, 3= moderate extent, 4= great extent, and 5= very great extent. The results are provided in Table 4.

**Table 4: Relationship Between Human Capacity and Provision of Health Care Services**

Statements	NA	LE	ME	GE	VGE	Mean	Std. dev
Capacity building on Monitoring & Evaluation increases access on provision of health services	27 (12.3%)	31 (14.1%)	48(21.8%)	87 (39.5%)	27(12.3%)	3.25	0.4
Technical support increases the knowledge on monitoring and evaluation	18 (8.2%)	34 (15.5%)	52(23.6%)	80(36.4%)	36(16.4%)	3.37	0.3
Core training packages increases the management capacity on provision of health care	20 (9.1%)	49(22.3%)	76(34.5%)	43(19.5%)	32(14.5%)	3.08	0.1

There are regular trainings on Monitoring &Evaluation	35 (15.9%)	62(28.2%)	33(15.0%)	52(23.6%)	38(17.3%)	2.98	0.1
The staff has a credible competency level on Monitoring &Evaluation	42 (19.1%)	45(20.5%)	68(30.9%)	47(21.4%)	18(8.2%)	2.79	0.2
<b>Total</b>						<b>15.48</b>	<b>1.3</b>
<b>Composite mean and Std. Dev</b>						<b>3.09</b>	<b>0.26</b>

On capacity building on Monitoring & Evaluation increases access on provision of health services, out of 220 respondents who participated in the study, 27 (12.3%) said not at all, 31 (14.1%) said to a little extent, 48 (21.8%) said to a moderate extent, 87 (39.5%) said to a great extent and 27 (12.3%) said to a very great extent. This was backed by a mean of 3.25 and standard deviation of 0.4. This is greater than the composite mean and standard deviation which implies that capacity building on Monitoring & Evaluation increases access on provision of health services.

On technical support increases the knowledge on monitoring and evaluation, out of 220 respondents who participated in the study, 18 (8.2%) said not at all, 34 (15.5%) said to a little extent, 52 (23.6%) said to a moderate extent, 80 (36.4%) said to a great extent and 36 (16.4%) said to a very great extent. This was backed by a mean of 3.37 and standard deviation of 0.3. This is greater than the composite mean and standard deviation which implies that technical support increases the knowledge on monitoring and evaluation.

On core training packages increases the management capacity on provision of health care, out of 220 respondents who participated in the study, 20 (9.1%) said not at all, 49 (22.3%) said to a little extent, 76 (34.5%) said to a moderate extent, 43 (19.5%) said to a great extent and 32 (14.5%) said to a very great extent. This was backed by a mean of 3.08 and standard deviation of 0.1. This is lower than the composite mean and standard deviation which implies that core training packages does not increase the management capacity on provision of health care.

On whether there are regular trainings on Monitoring &Evaluation, out of 220 respondents who participated in the study, 35 (15.9%) said not at all, 62 (28.2%) said to a little extent, 33 (15.0%) said to a moderate extent, 52 (23.6%) said to a great extent and 38 (17.3%) said to a very great extent. This was backed by a mean of 2.98 and standard deviation of 0.1. This is lower than the composite mean and standard deviation which implies that there were no regular trainings on Monitoring &Evaluation.

On the staff has a credible competency level on Monitoring &Evaluation, out of 220 respondents who participated in the study, 42 (19.1%) said not at all, 45 (20.5%) said to a little extent, 68 (30.9%) said to a moderate extent, 47 (21.4%) said to a great extent and 18 (8.2%) said to a very great extent. This was backed by a mean of 2.79 and standard deviation of 0.2. This is lower than the composite mean and standard deviation which implies that the staff did not have a credible competency level on Monitoring &Evaluation.

**Status of Provision of Health Care Services**

To achieve this objective, the respondents were asked to give their opinions on the level of agreement or disagreement with the statements provided in a likert scale of 1-5 where 1=strongly disagree, 2= disagree, 3= not sure, 4= agree, and 5= strongly agree. The results are provided in table 4.5.

**Table 5: Agreement Level on Human Capacity and Provision of Health Care Services**

Statements	SD	D	NS	A	SA	Mean	Stddev
Capacity building increases human capacity in provision of Health care services	15(6.8%)	45(20.5%)	45(20.5%)	92(41.8%)	23(10.5%)	3.29	0.6
Technical support increases knowledge in Monitoring &Evaluation	16 (7.3%)	43(19.5%)	47(21.4%)	85(38.6%)	29(13.2%)	3.31	0.5
Core training packages increases the quality of health care services	50 (22.7%)	33(15.0%)	65 (29.5%)	40(18.2%)	32(14.5%)	2.87	0.2
Workshops on Monitoring &Evaluation trainings are regularly attended	28(12.7%)	65(29.5%)	42(19.1%)	60(27.3%)	25(11.4%)	2.95	0.1
The Monitoring &Evaluation officers has a high competent level in project management	12(5.5%)	72(32.7%)	65 (29.5%)	50(22.7%)	21(9.5%)	2.98	0.1
<b>Total</b>						<b>15.4</b>	<b>1.5</b>
<b>Composite</b>						<b>3.08</b>	<b>0.3</b>

On capacity building increases human capacity in provision of Health care services, out of 220 respondents who participated in the study, 15 (6.8%) strongly disagreed, 45 (20.5%) disagreed, 45 (20.5%) were not sure, 92 (41.8%) agreed and 23 (10.5%) strongly agreed. This was backed by a mean of 3.29 and standard deviation of 0.6. This is greater than the composite mean and standard deviation which implies that capacity building increases human capacity in provision of Health care services.

On technical support increases knowledge in Monitoring & Evaluation, out of 220 respondents who participated in the study, 16 (7.3%) strongly disagreed, 43 (19.5%) disagreed, 47 (21.4%) were not sure, 85 (38.6%) agreed and 29 (13.2%) strongly agreed. This was backed by a mean of 3.31 and standard deviation of 0.5. This is greater than the composite mean and standard deviation which implies that technical support increases knowledge in Monitoring & Evaluation.

On core training packages increases the quality of health care services, out of 220 respondents who participated in the study, 50 (22.7%) strongly disagreed, 33 (15.0%) disagreed, 65 (29.5%) were not sure, 40 (18.2%) agreed and 32 (14.5%) strongly agreed. This was backed by a mean of 2.87 and standard deviation of 0.2. This is lower than the composite mean and standard deviation which implies that core training packages does not increase the quality of health care services.

Whether workshops on Monitoring & Evaluation trainings are regularly attended, out of 220 respondents who participated in the study, 28 (12.7%) strongly disagreed, 65 (29.5%) disagreed, 42 (19.1%) were not sure, 60 (27.3%) agreed and 25 (11.4%) strongly agreed. This was backed by a mean of 2.95 and standard deviation of 0.1. This is lower than the composite mean and standard deviation which implies that workshops on Monitoring & Evaluation trainings are not regularly attended.

On Monitoring & Evaluation officers has a high competent level in project management, out of 220 respondents who participated in the study, 12 (5.5%) strongly disagreed, 72 (32.7%) disagreed, 65 (29.5%) were not sure, 50 (22.7%) agreed and 21 (9.5%) strongly agreed. This was backed by a mean of 2.98 and standard deviation of 0.1. This is lower than the composite mean and standard deviation which implies that Monitoring & Evaluation officers did not have a high competent level in project management.

**Regression Analysis**

In this study, a multiple regression analysis was conducted to test the influence among human capacity indicators. The research used statistical package for social sciences (SPSS Version 21) to code, enter and compute the measurements of the multiple regressions.

**Table 6: Multiple Regression Between Human Capacity and Provision of Health Care Services (dependent variable) in Public Health Institutions**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.793	.629	.618	.1016

a. Predictors: (Constant), Level of capacity building, Level Technical support, Number of training packages.

The data in Table 6 indicated that R-Square (coefficient of determination) is a commonly used statistic to evaluate model fit. R-square is 1 minus the ratio of residual variability. The adjusted R<sup>2</sup> also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent indicators of human capacity. 61.8% of the provision of health care services in public health institutions in Migori County. Variables could be attributed to the combined effect of the human capacity indicators.

**Table 7: ANOVA Results of the Regression Analysis Between Provision of Health Care Services in Public Health Institutions and Human Capacity Indicators**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.672	3	2.176	3.184	.05
	Residual	94.682	213	.782		
	Total	107.354	216			

a. Predictors: Level of capacity building, Level Technical support, Number of Training packages.  
 b. Dependent Variable: provision of health care services in Public Health Institutions in Migori county.

The data in Table 7 indicated that the probability value of 0.05 indicates that the regression relationship was highly significant in predicting how level of capacity building, level technical support and number of training packages influenced provision of health care services in public health institutions in Migori County.



The F critical at 5% level of significance was 3.184 since F calculated is greater than the F critical (value = 2.830), this shows that the overall model was significant.

**Table 8: Regression Coefficients of the Relationship Between Provision of Health Care Services in Public Health Institutions and the Human Capacity Indicators**

Model		Unstandardized Coefficients			Standardized Coefficients	
		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.403	0.356		3.674	0.000
	Level of capacity building	0.621	0.146	0.608	0.245	0.05
	Level Technical support	0.573	0.189	0.527	0.169	0.04
	Number of Training packages	0.482	0.254	0.461	0.382	0.001
a. Dependent Variable: provision of health care services in Public Health Institutions						

As per the SPSS generated table above, the equation ( $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon$ ) becomes:  
 $Y = 1.403 + 0.621X_1 + 0.573 X_2 + 0.482 X_3$

The regression equation in Table 8 has established that taking all factors into account (level of capacity building, level technical support, and number of training packages) constant at zero provision of health care services in Public Health Institutions will be 1.403. The findings presented also show that taking all other independent variables at zero, a unit increase in level of capacity building would lead to a 0.621 increase in the provision of health care services in Public Health Institutions.

Further, the findings shows that a unit increases in level technical support would lead to a 0.573 increase in provision of health care services in Public Health Institutions. In addition, the findings show that a unit increase in number of training packages would lead to a 0.482 increase in provision of health care services in Public Health Institutions. Overall, number of training packages had the least effect on provision of health care services in Public Health Institutions and level of capacity building had the highest effect.

Level of capacity building calculated p-value was found to be 0.05 which is statistically significant ( $p < 0.05$ ) which is level of confidence. The level of capacity building has a positive significant influence on provision of health care services in public health institutions. Level technical support calculated P-value was found to be 0.04 which is statistically significant since  $P < 0.05$ . There is a positive correlation between level technical support and the provision of health care services in public health institutions. Number of training packages calculated P-value was found to be 0.001 which statistically  $P < 0.05$  hence significant. There is a positive correlation between number of training packages and the provision of health care services in public health institutions.

## VI. Conclusions

The study concluded that capacity building on Monitoring & Evaluation increased access on provision of health services to a moderate extent. Technical support increased the knowledge on monitoring and evaluation systems to a moderate extent. Core training packages increased the management capacity on provision of health care to a moderate extent. There were regular trainings on Monitoring & Evaluation. Overall, number of training packages had the least effect on provision of health care services in Public Health Institutions and level of capacity building had the highest effect. Level of capacity building calculated p-value was found to be 0.05 which is statistically significant ( $p < 0.05$ ) which is level of confidence. The level of capacity building has a positive significant influence on provision of health care services in public health institutions.

## VII. Recommendations

The public health institution management should offer technical support to the personnel. This would help to increase the knowledge on monitoring and evaluation systems. Core training packages need to be emphasized. Regular trainings need to be put in place for all the personnel and especially the M & E department.

## VIII. Limitation

Migori County is expansive and has 223 health facilities scattered which means that high travelling costs was incurred, however the research used questionnaires to help gather information within the shortest time possible. Limited resources for doing the research were a barrier in this study; this is because the researcher needs to employ research assistants to help in the collection of data. This was handled by ensuring the researcher will work on the specified budget time and scope. The findings can only be relevant to Migori County because health statistics on monitoring and evaluation may differ from one county to another. Another limitation is that it was likely to be tiring and time consuming. The researcher did not get all the questions answered correctly by the sampled population and sometimes they may hide some useful information especially that is touching on data auditing for fear of the unknown or disclosure of the information to other parties. This was overcome by the

researcher assuring the respondents that the study was purely for academic purposes and all the information given here would not be divulged to any other third party and all the concern of ethical issues would observed. Other limitation that the researcher may encounter is the distances to travel to reach the health facilities since the area is so large. This, the researcher overcame by engaging research assistant and also hire some cabs for transport to reach all the health facilities targeted.

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