

# Capacity Building of Healthcare Professionals within the Context of Sustainable Development

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**Abstract:** Capacity building in key areas such as data management, analysis, monitoring and evaluation techniques and contraceptive forecasting methodologies are critical to strengthening the sexual and reproductive health (SRH), and Contraceptive Logistics Management Information System (CLMIS) platforms, especially considering the context of sustainable development. Within the time-line of the Sustainable Development Goals (SDGs), the World has the opportunity to achieve a grand convergence between the developed and developing World, ending preventable child and maternal deaths and achieving relative parity in meeting the family planning needs of women, men, couples, and adolescents who want to space or limit childbearing. Such august knowledge, has over the years, helped the National Family Planning Board (NFPB) and its national and international partners to be better able to execute evidence-based policy-programme decision-making and mission critical policy-research interface.

This paper aims to highlight the findings from (a) two specific trainings that were delivered by the Monitoring, Evaluation and Research team of the NFPB; and (b) a two-fold evaluation of the said trainings.

Healthcare professionals (N=270) were trained in Qualitative and Quantitative Data Management, Monitoring, Evaluation, the Use of Pivot Table for Quality Reporting; and Contraceptive Forecasting Methodologies across the four health regions of Jamaica.

An assessment of the Qualitative and Quantitative Data Management, Monitoring, Evaluation, the Use of Pivot Table for Quality Reporting revealed that 81% of the trainees formally postulated that they benefitted from the techniques taught. The overall assessment of the contraceptive forecasting training showed that there was statistically significant improvement in the scores between the pre-assessment and post-assessment of the trainees (p=0.000). These values highlight the success of the objectives from the training sessions being achieved. Evidence of improvement in the wider array of the SRH and CLMIS platforms was noted, per the evaluation results.

**Keywords:** Capacity Building, Sustainable Development, Data Management, Contraceptive Forecasting, Healthcare Professionals.

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## 1. INTRODUCTION

Jamaica's Vision 2030 – Development Plan is aligned with the United Nations' (UN) 17 SDGs, and is slated to be achieved within the same time-frame [1]. In order to track the progress of the SDGs, emphasis must be placed on quality data monitoring and reporting. Therefore, strengthening human resources in health is one of the avenues to garnering fruition in an era of sustainable development.

This important piece of work was conducted with a primary approach to execute two trainings, which involved healthcare professionals. These trainings aimed to improve data management and processing of key indicators used by the specific group to monitor progress. The trainings were titled, "Quantitative and Qualitative Data Management, Monitoring, Evaluation, the Use of Pivot Table for Quality Reporting; and Contraceptive Forecasting Methodologies". This paper articulates an Abstract, an introduction of the paper, a review of the literature, the various methods that were embarked upon, the results that emanated from the trainings and the evaluations, the discussion, conclusion, and acknowledgement.

## 2. REVIEW OF RELATED LITERATURE

Good health and well-being is one of the critical SDGs for developing countries [2]. Within the context of family planning, this is vital to the achievement of all the 17 Sustainable Development Goals (SDG) - from reducing poverty to slowing climate change to preventing civil unrest [3]. In addition, “family planning has a critical role to play in curbing the HIV/AIDS epidemic” [3]. Of important note too is that “SDG 3.7, supports universal access to SRH care services, including family planning, while 5.6 supports universal access to sexual and reproductive rights”[4]. Within and without the context of the SDGs, “family planning is a cross-sectoral SRH intervention that can hasten progress across the five SDG themes of People, Planet, Prosperity, Peace, and Partnership” [4].

In order to track the progress of the goals, proper monitoring is important by using indicators and quality progress reports that capture critical information. This means that there should be a focus on strengthening health information systems of countries in an effort to enable accurate information capture, and the efficient use of evidence-based decision-making [5]. Such mode of strengthening lends itself to the employment of capacity building among healthcare professionals.

This also highlighted the need to strengthen the health system by training of critical healthcare professionals to meet the demand for data used to calculate indicators [6]. This is crucial because if decision-making is enabled with the use of inaccurately informed data, then this would likely compromise the ability to make effective, meaningful policies to attain the SDGs [6].

In essence, in order to address data quality issues within the health sector, there needs to be an emphasis on improving training curriculum for the existing and prospective human resources [7]. Utilising World Health Organization’s (WHO) six health system building block aided in identifying improvement opportunities, as well as, assessing the process to strengthen the health system [8]. The six building blocks are service delivery; health workforce; information; medical products, vaccines and technologies; financing; and leadership and governance [9].

Tied to these building blocks, it may be noted that “in the time frame of the SDGs, the World has the opportunity to achieve a grand convergence between the developed and developing world, ending preventable child and maternal deaths and achieving relative parity in meeting the family planning needs of women, men, couples, and adolescents who want to space or limit childbearing” [4].

These building blocks were not only applicable to Jamaica’s stipulated health Outcome (“A Healthy and Stable Population”)[1], but also to the *modus operandi* of the health sector, which ought to be dictated by distinctive competencies in human resources, hence training in the aforementioned twin-disciplines.

In building the capacities of health care providers, adopted from the literature was that the qualitative approach, despite not being able to generalise because of its limited sample capacity, possesses the ability to create a research-programme-policy-legislative interface by virtue of its reflective nature [10]. The author further maintained that qualitative methodology also provides in-depth detail from shared experiences that may be used for technocratic-type discussion, allowing process for possible change or adjustments. This is because data may be shared with the relevant programme-policy personnel as part of a wider discussion, thus enabling reflection in determining ways in which the findings of qualitative-type studies may be useful [10]. The limitation regarding not being able to generalise, does not take away from the fact that qualitative research possesses “the scope of understanding investigated phenomena” [11]. Simply put, the qualitative methodology is the epistemological propensity to efficiently capture the essence of real life matters [12]. On the other hand, the quantitative approach is numerical in nature, and allows for generalisation. It enables prediction and control phenomena of interest” [13].

In view of the contraceptive forecasting methodology training, the primary advantage of forecasting is that it provides the business with valuable information that the business can use to make decisions about the future of the organisation. In many cases forecasting uses qualitative data that depends on the judgment of experts [14].

Contraceptive forecasting is a reproductive health tool used to project the contraceptive needs. This tool is very important for SRH because stock-out of contraceptives could lead to issues regarding sexually transmitted infections, unwanted pregnancy, maternal and child deaths; unmet need for family planning and decrease the contraceptive prevalence rate which are critical indicators for the SRH system [15], [16].

This brought to mind, the use of the Logistics Indicator Assessment Tool (LIAT). “The LIAT is a quantitative data collection instrument developed by the DELIVER Project [17]. This tool was used to conduct a facility-based survey to assess health commodity logistics system performance and commodity availability at health facilities. The LIAT can be used to monitor the performance of certain processes involved in the logistics management of health commodities over time, to evaluate certain outcomes of logistics interventions, to provide ongoing supervision and performance monitoring, and to monitor commodity availability. The data collected using the LIAT can be used to calculate the following core logistics indicators: Accuracy of logistics data for inventory management; percentage of facilities that receive the quantity of products ordered; percentage of facilities that maintain acceptable storage conditions; percentage of facilities whose stock levels ensure near-term product availability (stock status); percentage of facilities that experienced a stock-out at any point during a given period or at the time of the visit. In addition to these indicators, the data collected may also be used to calculate additional related indicators, such as duration of stock-outs, reasons for stock-outs, *etcetera*” [17].

Of important note is that the NFPB’s assessment of the CLMIS had identified the need for capacity building, as part of the efforts to strengthen the CLMIS. Such recognition had lent itself to the fact that missteps in any CLMIS would likely affect the gains made by the country in its fight against several SRH issues [18].

### 3. METHODOLOGY

This article highlights the modes of training deliveries and the scholarly disciplines employed, being two-fold: (1) Qualitative and Quantitative Data Management, Monitoring, Evaluation, and the Use of Pivot Table for Quality Reporting; and (2) Contraceptive Forecasting Methodologies. These two disciplines of academia and social logic were delivered as capacity building exercises over a two-year period, involving health care professionals throughout the four health regions of Jamaica; namely: Southeast Regional Health Authority, Southern Regional Health Authority, Northeast Regional Health Authority and Western Regional Health Authority.

#### **Qualitative and Quantitative Data Management; Monitoring and Evaluation and Use of Pivot Table for Quality Reporting**

The engagement of the participants began with the official notification to the Regional Technical Directors and the Senior Public Health Nurses of the four health regions, after the need for such training was identified. This call was mainly as a result of anomalies that were detected from having conducted the CLMIS Survey and Clinic Monitoring. The health authorities also expressed the need to build the capacities of the health care professionals in the captioned discipline. The key aim was to enable improvement in reporting.

The selection of the trainees was made by the Regional Public Health Nurse Supervisors. This was based on the regions’ training needs assessments. The individuals who were identified to participate in the training were the Public Health Nurses, Registered Nurses, Midwives, Registered Midwives, Social Worker and Contact Investigator for HIV.

In delivering the course, the ME&R team took a student-centred approach, in accordance with Democratic Pedagogical Model (established by Paulo Freire) - a way for the trainers to not be “the subject of the learning process, while the pupils are mere objects” [19]. Besides, the author considered this model as an avenue whereby trust was easily obtained, hence the likelihood of achieving success among human beings [19].

The objectives of the training were to:

- understand the role of Quantitative and Qualitative Data Management and Reporting in Sexual and Reproductive Health (SRH) Programmes;
- appreciate the importance of data quality in Sexual and Reproductive Health;
- generate and interpret Descriptive Statistics (Frequency, Rates, Averages and Graphs) using the Pivot Table in Microsoft Excel;
- understand SRH-related indicators, its measurements and calculations

During the execution of the delivery of the course, both the trainers and participants were keen on ensuring that the objectives were met. In addition, the course was segmented in such a way so as to later make provision for future

assessment of capacity building and on-the-job application, akin to what was taught, using the Kirkpatrick Evaluation Model [20].

The training process was very participatory in the sense that questions, answers and discussions were engaging at high-energy. The course delivery took the form of MS PowerPoint presentations, hands-on practical work using the computer, and role play. The latter assessed whether the participants had a full grasp of the subject areas. Here, the participants were asked to volunteer to play the role of their choice. This customised role play was qualitative and quantitative-based. The participants played the role of the Health Minister, Regional Technical Director, Nurse and Patients.

To be more specific, the areas of delivery were: How to effect proper data collection, analysis and reporting using qualitative and quantitative approaches; the advantages, disadvantages, strengths and limitations regarding the use of both approaches; how to triangulate; ways to determine and calculate key SRH indicators within the context of Monitoring and Evaluation; the use of the pivot table (design tables based on data table theory, apply filter and sort methods, create and delete Pivot Tables and Pivot Charts, format, sort, filter, subtotal and refresh a Pivot Table, use the slicer, and creation of an interactive dashboard).

Complimentary to these areas were the application of the WHO building blocks; namely: Service Delivery, Health Workforce, Information, Medical Products, Vaccines and Technologies, Financing, and Leadership and Governance, as these form part of the overarching considerations of the Strategic Business Plan and direction of the Ministry of Health and Wellness (MOHW), which is the parent Ministry of the National Family Planning Board, being a Statutory Body governed by an Act of Parliament of 1970. These building blocks were pertinent to quality reporting for national and international purposes, as well as the national health Outcome of Jamaica, as delineated in the National Development Plan – Vision 2030. The Outcome states: “A Healthy and Stable Population“[1].

At the end of this course, a total of six Continuing Medical Education Credits were awarded to the participants, under the auspice of the Nursing Council of Jamaica.

### **Contraceptive Forecasting Trainings**

The engagement of the participant was similar to the Qualitative and Quantitative Data Management, M&E, and the Use of Pivot Table for Quality Reporting trainings, with the difference being that the selection of trainees was limited to midwives. This was because this category of participants had worked directly with the Contraceptive Registers and Logbooks in the name of standard reporting at parish, regional and national levels.

The key objectives of the training were for the participants to be able to:

- understand the principles of contraceptive forecasting methodologies
- learn how to apply basic forecasting to contraceptive procurement, ordering and stock management
- apply inventory control principles.

Throughout the delivery of the training, efforts were made at intervals to ensure that the objectives were met. At the onset, the participants were made aware of the various ways in which family planning was linked with all of the 17 SDGs. Of important note too, they were sensitised regarding the LIAT, which was used during the clinic monitoring and which was shared during the training in order to garner a more fulsome appreciation and understanding of the instrument. This tool was adopted from the United States Agency for International Development (USAID).

The course delivery entailed Microsoft PowerPoint Presentations, Nurses Challenge Quiz, Electronic Monthly Clinical Summary Reporting, Inventory Control Case study, Forecasting Methodologies, and Contraceptive Management Scenarios.

As the data collection process continues to transition from a total paper-based to a hybrid system (mixture of paper-based and electronic-based), training was critical to ensure that the transition was smooth and all stakeholders understood the purpose of the indicators in monitoring the progress of its programme. One such example was the electronic Monthly Clinic Summary Report (eMCSR) which was developed by the MOHW to capture and report aggregate client data for all primary care health facilities. The objectives of the eMCSR capacity building delivery across the four health regions were as follows:

1. To enable reporting accuracy within the Contraceptive Logistics Management Information System.
2. To improve standard reporting of the eMCSR data across the health regions
3. To provide clarity on matters relating to the primary healthcare data management system.

The transition from paper-based to electronic data collection was expected to improve the efficiency and quality of data processing to be used for decision-making, in policies, programmes and projects.

On the point of the Inventory Control Case Study, this comprised one case with six (6) questions. These questions were developed with the aim to help participants to employ the knowledge obtained from the training, so as to determine the minimum and maximum stock levels for a simulated clinic. This was also used to reinforce the concepts so that they may be appreciated and employed throughout the CLMIS.

In regard to the scenarios, two general questions were posed. Question one asked participants to employ the forecasting methodologies learnt in the training to a scenario; while question two required participants to use the provided information to complete an adaptation of the Monthly Contraceptive Logbook. The purpose of these two scenarios was to investigate if the participants were able to apply to their jobs, the information obtained during the training. Here is an example of one of the scenarios:

#### Scenario #1

The table below represents the contraceptive usage for the Apple Tree Clinic.

Month	Contraceptive Method		
	Depo Provera	Microgynon	Condom
January	30	25	50
February	40	20	70
March	35	23	65
April	37	26	80
May	42	19	55
June	?	?	?

Use the information presented in the table to calculate the following (**show all working**)

- a) Using the simple average forecasting procedure, how many Depo Provera should the Apple Tree Clinic order for the month of June?
- b) The Family planning coordinator for the clinic is currently in the process of ordering Microgynon and condom. Use either the moving average or the weighted moving average forecasting procedure to assist her to procure the right amount of contraceptive pills.

During the brainstorming activities, the trainers and participants communicated that when one thought of forecasting, then the following should come to mind: Projections, Predictions, Trend Analysis, Planning, Organising, Risks, Timing, Demand, Reconciliation, Adjustments, Cost, Procurement Guidelines, Environment (political, climate, policy, and commitment). The various reasons for forecasting was also articulated, along with some types of contraceptive forecasting methodologies which may be employed, as well as, crucial implications for the absence of contraceptive forecasting. For the former, the importance of forecasting was stated as easement in procurement, accurate monitoring, accurate determination of demand, audit readiness, unlikely stock-out, unlikely over-stocking, and likely improvement in contraceptive logistics. In terms of the methodologies, the following were presented: Simple and Moving Averages, Real Demand, Inventory Control Procedures, Trend projection, Delphi, Exponential Smoothing, Box-Jenkins Models, and Regression Analysis. In regard to the implications, noted were that failure to execute effective and efficient contraceptive forecasting, the following may occur: Increase in the prevalence of STIs including HIV; increase in the incidences of unwanted and unintended pregnancy; increase in maternal and child injuries or deaths; increase in unmet need; inability to meet demand; weakened CLMIS; clients may be forced to source family planning methods elsewhere; clients may be forced to choose a method that was not of his/her ideal preference; clients may lose faith in the public health system and its providers; the client may consider the system a threat to his/her reproductive health welfare/wellbeing; plus the misuse of method may occur.

In addition, the participants were sensitised on the importance of applying the six rights as part of forecasting techniques. These were the right contraceptive method, the right quantity, the right place, the right time, the right condition. In other words, “the staff who managed contraceptive supplies needed to determine how much (quantity and cost), of what (contraceptive) needs to go where (what location), when and how to get it there in good condition” [21]. The author also advised that “the right amount of supplies on hand (not too many, not too few), contraceptives of good quality (not expired, not damaged), a full selection of the contraceptive methods that the programme offers and clients requests were crucial to good forecasting” [21]. These rights were discussed at length and was part of the quiz.

It is imperative to note that during the training, relevant statistics and indicators were shared, arising from the Reproductive Health Survey of Jamaica, which was published by the National Family Planning Board. Some of these statistics and indicators (for example, unmet need, contraceptive prevalence, adolescent pregnancy, fertility rate, maternal mortality, etcetera) were also used as discussion points and quizzes during the session. Prizes were awarded by the trainers to the participants who got the correct answers.

Of important note, owing to the Coronavirus/COVID-19 Pandemic, the course offering to the participants of the Northeast Regional Health Authority was segmented into three groups of 10 each, over a three-day period, unlike prior to the pandemic, when the groups comprised 30 in one sitting. This kind of physical distancing was to prevent any potential spread of the virus. However, learning did not appear to be different because of the smaller numbers. The vibrancy and keen attention paid by the participants remained the same as when there were 30 participants.

Upon conclusion of this course offering, a total of seven Continuing Medical Education Credits were awarded to all the participants, under the auspice of the Nursing Council of Jamaica.

### Evaluations

The evaluations were two-fold, and occurred at different time periods. Firstly, on-the-spot evaluation, which was employed immediately at the conclusion of the training was very stimulating and entertaining. As a matter of fact, similar to the training, Banking Concept Model was executed, reflective of democratic mode of delivery within the context of the adult learner. This evaluation exercise took the form of the participants completing a two-page, 11-item instrument, which aimed at determining the participants’ perspectives on all the areas of delivery [22].

One year later, another evaluation was done so as to determine the extent to which capacity was built, as it relates to know-how ability application to the job. Here, the objectives were to determine whether

- the capacity of the participants were built with respect to the training
- there were clear demonstration of the participants being able to apply that which they learnt on the job
- the methodologies presented, had led to a reduction in stock-out of contraceptive methods at the participants’ facilities
- the techniques presented, had led to improvement in recording, reporting, ordering/procurement of contraceptive supplies and storage.

In addition, the four principles of the Kirkpatrick Evaluation Model (developed by Dr. Donald Kirkpatrick in 1950) were applied. This model was used as a means of evaluating the beginning, the middle and the post-phase of the training, to show the extent to which the training had met its objectives. The four levels of the model were: Level 1 – The degree to which targeted outcome occurred as a result of the learning event(s) and subsequent reinforcement; Level 2 – The degree to which participants apply that which they learned during training when they were back on the job; Level 3 – the extent to which participants acquired the intended knowledge, skills and attitude based on their participation in the learning event; Level 4 – The degree to which participants reacted favourably to the learning event [23], [24].

In an effort to determine if the four levels/principles were achieved, the evaluation took two formats: (a) Microsoft PowerPoint presentations, discussions and quizzes among the health care professionals who were taught a year prior; and (b) clinic monitoring. The latter sought to note evidence-verification regarding the four levels of the Kirkpatrick Model, taking into consideration, reporting, record-keeping, stocks, ordering/procurement and storage conditions and capacities.

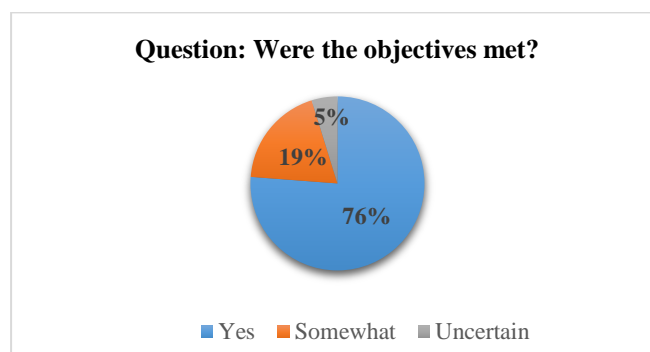
## Data Analysis Procedures

Data collected from both trainings were analysed using the Statistical Package of the Social Sciences 22.0, as well as, manual count – the latter was tallied using Microsoft Excel. Afterwards the information was compiled into a comprehensive reporting format.

## 4. RESULTS

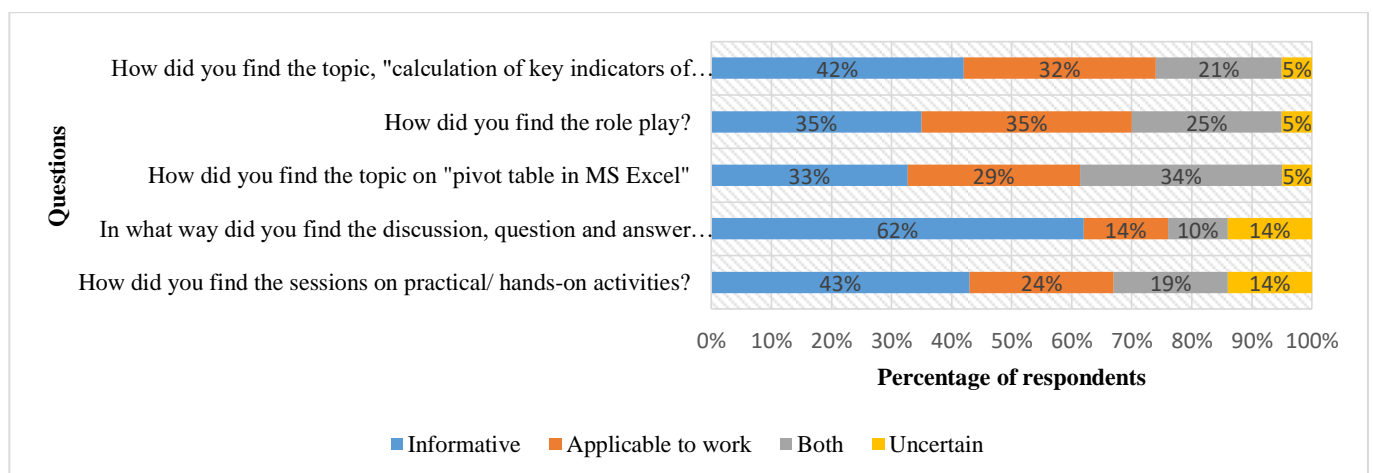
### Qualitative and Quantitative Data Management, Monitoring, Evaluation, and the Use of Pivot Table for Quality Reporting

A total of one hundred and thirty (130) healthcare professionals from the RHAs were trained. These professionals included Public Health Nurses, Midwives, Social Worker, and Contact Investigator for HIV. The training delineated the significant difference between qualitative and quantitative data analysis and reporting; ways to determine and calculate indicators; techniques in monitoring and evaluation methodologies; and how to use the Pivot Table effectively. The following represents the participants' responses to the course evaluation questions.



**Figure 1: Pie Chart Showing Participants Feedback on the Objectives of the Training**

The participants provided their feedback on how well they thought the objectives of the training were met - 76 percent (76%) indicated that the objectives were met; nineteen percent (19%) thought that they were partially/somewhat; met and five percent (5%) uncertain (Figure 1).



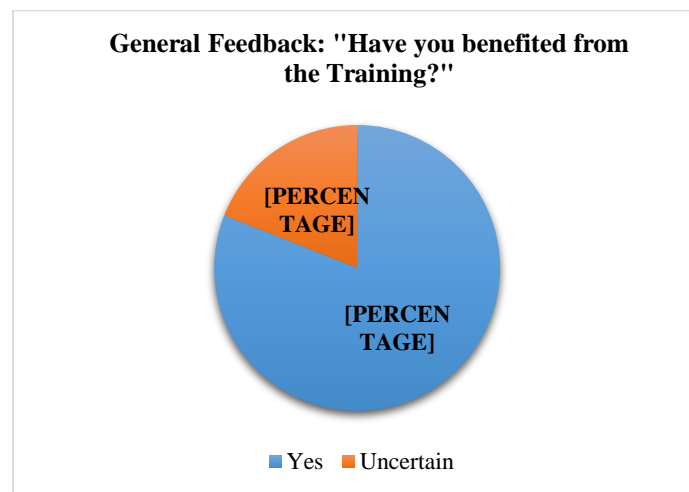
**Figure 2: Bar Chart Showing Participant's Perception on Training Deliverables**

Figure 2 shows where a Likert scale was used to capture the participant's perception on each deliverable of the training; whether they found the deliverable informative, applicable to their work, informative and applicable to their work (both), neutral, or uncertain. The calculation of key indicators of M&E saw participants indicating informative (42%), applicable to work (32%), both (21%) and five percent (5%) intimated that they were uncertain.

Role play was incorporated into the training. Thirty-five percent (35%) of persons found it informative and applicable to work; twenty-five percent (25%) responded both and five percent (5%) were uncertain.

In regard to capacity building in the use of the Pivot Table in Microsoft Excel, the participants noted their perception as follows: Thirty-three percent (33%) of the participants indicated that the training was informative, while 29% considered it applicable to their work. Thirty-four percent (34%) formally intimated that the training was both informative and applicable to their work, while only five percent (5%) were uncertain as to whether it was informative or applicable to their work. The practical component of the training proved mostly informative (43%), twenty four percent (24%) saw it applicable to work, nineteen percent (19%) responded both and the remaining fourteen percent (14%) were uncertain about this activity.

At the end of each presentation, the participants were engaged in a discussion and question and answer session. The majority of participants found this section to be informative (62%). Fourteen percent (14%) indicated applicability to work, ten percent (10%) selected both, and for the latter, fourteen percent (14%) stated that they were uncertain.



**Figure 3: Pie Chart Showing Participants feedback on the Overall Training.**

Eighty-one (81%) percent of participants benefited from the training (Figure 3). However, nineteen percent (19%) of the participants declared uncertainty. The explanation given for the uncertainty was that they were not very sharp on the MS Excel package, and so would require more time to digest that aspect of the information, as a result, an additional day of training was requested, with focus on Microsoft Excel, particularly, the Use of the Pivot Table.

Overall, the training was well received by the health care professionals, who paid very keen attention throughout the sessions, and expressed reservations in taking the one-hour lunch break that was proposed. At the end of each session, vote of thanks was delivered to the trainers.

### **Contraceptive Forecasting Training**

The components of this course entailed an overview of the forecasting process and its importance in reducing stock-outs and over stocking; intimacy between family planning and the 17 sustainable development goals; eMCSR; Data sources, collection and processing (accurate record-keeping); Forecasting Methodologies: The Simple and Moving Averages, Missing Data, Real Demand; Practical Inventory Control Procedures (Minimum and Maximum Stock Levels); Contraceptive Logbook and Register.

Prior to, and immediately after the training, both pre- and post-tests were administered accordingly. The analysis from the tests revealed the following:

In total, 64.7 percent (N=55) midwives participated in the pre-test while 100 percent (N=85) completed the post-test. The mean score for the pre-test was 5.76 and 11.88 for the post-test with an arithmetic mean difference of 6.12. Statistical significance<sup>1</sup> between the pre- and post-test results was tested at the 5% level of significance ( $p < 0.05$ ). In this inferential analysis, the assumption was that post-test scores were expected to increase having exposed the nurses to the training. As such, the findings revealed a statistical significant improvement in scores between the pre- and post-test results ( $p = 0.000$ ).

<sup>1</sup> One Sampled t-test ( $t = 25.8$ ,  $p < 0.05$ )



The expressed eager/desire by the participants to do the post-test, over-rode the instructors' advice that only those who did the pre-test should do the post-test, so as to avoid potential anomalies in the analysis.

A case study was administered for the post-test instruments. Cumulatively, ninety-five percent (95%) of participants were able to identify between two (2) to five (5) implications of stock-out within the system. However, when asked to select the best definition of forecasting, thirty-five percent (35%) were successful. Fifty-seven percent (57%) of the nurses successfully identified the two main data sources for preparing a contraceptive forecast – Routine and Non-Routine. Nevertheless, ninety-eight percent (98%) identified the main source of data used to conduct forecasts within the system at the service delivery site (routine). The majority of nurses left the training equipped enough to apply the Simple Moving Average Technique (99%), which they were able to identify (94%) as the appropriate method of application for contraceptive management.

The course offering was very intense, and despite our (the trainers') encouragement for the participants to take a break, they expressed a preference to absorb the material as much as possible. Here is an example of the hard-working participants.



## Evaluation

This section highlights evaluation exercises which were carried out two-fold: (a) Face-to-face Microsoft PowerPoint presentations, discussions and quizzes with the group of individuals who were trained; and (b) Clinic Monitoring/Visits (physical visits to the clinics where the contraceptive records and stocks were thoroughly checked for compliance with quality standards).

### *Qualitative and Quantitative Data Management; Monitoring and Evaluation and Use of Pivot Table for Quality Reporting techniques*

The information obtained from this training was deemed for the most part, very information and applicable to the participant's daily work. The findings from the evaluation session noted that while a few participants found the use of the Pivot Table to be complex, there was improvement in the way data were recorded and reported. This bore evidence from physical examination of the Monthly Clinical Summary Report Sheets, Contraceptive Registers and Contraceptive Logbooks and the contraceptive supplies during the clinic visits.

### *Contraceptive Forecasting Training*

The results of the evaluation illustrated that the overall series of contraceptive forecasting trainings were successful in imparting the major forecasting and inventory control principles. The evaluation also showed that participants had great appreciation for the revised stock management books. In regard to the contraceptive logbook, majority of the participants were already implementing the procedures garnered from the training. The regions were for the most part, implementing the forecasting and inventory control methodologies into their daily work. The evaluation outlined areas that needed to be

strengthened. Specifically, the quiz highlighted the need for more training in the areas of unmet need for family planning, the causal forecasting model and family planning indicators.

## 5. DISCUSSION

This article notes that critical to the initiatives to honour the SDGs are capacity building, quality standard reporting and forecasting as an integral modes of operation overall.

As a result, areas that were pertinent to strengthening the SRH-CLMIS-Human Resources in Health platform, were delivered within the realm of capacity building, and the clinic monitoring/visits. The importance of these areas brought to bear, technical ways in which evidence-based information may be of utmost quality so as to avoid missteps in policy-programme decision-making.

In order to track the progress of goals, proper monitoring of indicators, with a focus on strengthening health information systems was important for evidence-based decision-making [5]. The results of this paper noted the various evaluation exercises that would enable such tracking.

Take for instance, not only were the objectives of both trainings were met, but the evaluation and clinic visits showed progress being made regarding the SRH and CLMIS regimes, based on evidentiary improvement.

## 6. CONCLUSION

Building the capacity of health care professionals as one of the avenues to strengthening the SRH and CLMIS platforms, continues to contribute to heightened appreciation for sustainable development as a whole. The employment of clinic monitoring, as evidentiary verification, applicable to the principles of the Kirkpatrick Evaluation Model, has also seen improvements in quality reporting, record-keeping, stocks, ordering/procurement and storage (conditions and spacing).

## 7. ACKNOWLEDGEMENT

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