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Improving human resources for health (HRH) through professional in-service trainings: The need, the processes and the outcome

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Abstract

Introduction: Appropriately skilled human resources for health (HRH) is critical to the achievement of most public health interventions especially in developing countries. Poor program management, reporting and evaluations are the bane of most public health programs in a number of low and middle-income countries, with human resource challenges being a contributing factor. This paper shares key experiences in implementing professional program management, monitoring and evaluation in-service trainings aimed at strengthening the capacity and competencies of health workers thereby improving the quality of health services across all levels in Nigeria. Methods: Excellence and Friends Management Consult (EFMC), in partnership with African Field Epidemiology Network (AFENET), Uganda and Global Public Health Solutions, USA and with funding from US Centers for Disease Control and Prevention (CDC) in 2012/2013 initiated, planned and executed two professional program management courses – Nigerian Professional Monitoring and Evaluation Short Course (NPMEC) and HIV and AIDS Program Management Short Course (HAPMSC). These courses lasted for three and six months respectively. Exceptional students were requested to submit a project proposal for an additional 3-month post-training project, for seed grants. A post course evaluation was conducted in June/July 2014 to ascertain the impact of the course on the career and work packages of the trainees. Results: The two professional courses trained 118 trainees (M= 72, F= 46) and implemented 103 approved projects covering various aspects of public health. The training was described in just two words: “LIFE

CHANGING” by a course a participant. In a post training evaluation, 66.7% of the respondents agreed that the trainings had within the period under review positively changed their jobs. Discussions/Conclusions: The EFMC professional program management, monitoring and evaluation short course contributed to the Human resources of Health stock in Nigeria, which has been said to be critical. There is dire need for a new crop of program managers with appropriate skills and competencies to monitor and evaluate programs for accountability of project budget execution, evidence-based planning and improving the health services and outcomes of Nigeria. Support for this training will help develop a critical mass of individuals who will jumpstart the generation of reliable data from Nigerian public health interventions for evidence based decisions and programming.

1. Introduction

Appropriately skilled human resources for health (HRH) is critical to the achievement of most public health interventions especially in developing countries. Poor program management, reporting and evaluations are the bane of most public health programs in a number of low and middle-income countries, with human resource challenges being a contributing factor.

Critical to the achievement of most public health interventions including the US Presidential Emergency Plan for AIDS Relief (PEPFAR) objectives, Millennium Development Goals (MDG) and other health outcomes is a strengthened Health system [1-3]. There is evidence to show that in the last several years, there has been a remarkable increase in funding for global health [4-7]. Most of these resources for global health come tightly linked to addressing specific disease problems, namely; HIV/AIDS, tuberculosis, malaria and sometimes some neglected tropical diseases. Recently efforts have shifted to include non-communicable diseases and traumas. However, these funds have not been able to provide commensurate outcomes as a result of several anomalies facing the health systems including inadequate health workforce [7-15]. The increase in funding for global health has also led to an associate increase in the amount of data generated due to the rising numbers of health programs, service delivery sites, and patients [13, 16]. Similarly, the number of indicators being monitored within health information systems has increased, and there is greater emphasis on evidence-based planning, accountability and transparency in program budget execution. Although the importance of data is increasingly acknowledged, poor data quality has been noted in a number of low and middle-income countries, with human resource challenges being a contributing factor [17-20].

The World Health organization (WHO) has proposed the health system building blocks which are now widely recognized as essential components of health systems strengthening [21]. These building blocks include service delivery, financing, governance, the health workforce,

information systems, and supply management systems. The entire blocks revolve around the health workforce component which is needed to provide services, manage finances, ensure effective governance, oversee the information systems and provide management of the entire process.

Nigeria with an estimated population of 162,265,000 (2012), is the most populated country in sub-Saharan Africa [23], and is among the 57 countries identified by the WHO as having a human resources for health (HRH) crisis due to insufficient numbers of health providers [12]. With a national HIV prevalence of 4.1% as at 2010, and an estimate of over 3.4million people living with HIV/AIDS [23], the country accounts for 10% of the global HIV burden [24]. Several efforts are being made to improve the HRH stock in the nation through several national policies, training and retraining.

A key strategic approach to addressing the severe shortage of health care workers in many countries is in-service trainings [9,14,15]. In Nigeria several in-service trainings have been is being conducted with support from both government and international donors [15]. However, these conventional training programs have not paid much attention on the role of skills building in health systems strengthening, or where this has happened; training programs have tended to focus on the theoretical rather than practical aspects of taught courses [3,25]. Also evidence supporting appropriate professional trainings in monitoring and evaluation of health programs in Nigeria is limited as most training are done on ad hoc basis. Some trainings require personnel to be away from their workplace for extended periods of time thereby creating disruption in service delivery at their facilities. Moreover, failure to reinforce skills and knowledge transfer by addressing other performance factors (such as work environment, organizational support, clear expectations and feedback, and motivation to reinforce proper attitudes and habits) have continued to hamper the effective application of newly-acquired learning in the workplace [3,25].

With this background in mind, Excellence and Friends Management Consult (EFMC) in partnership with African Field Epidemiology Network (AFENET) and Global Public Health Solutions, with support from US Centre for Disease Control and Prevention (CDC) initiated a 3-6-month Professional Program Management with emphasis on Monitoring and Evaluation short course aimed at improving the capacity of health workers in program management, monitoring and evaluation. The main purpose of the training was to develop a new cadre of public health professionals that is able to plan, monitor, and evaluate public health interventions and recommend improvements at the Federal, State, and local government levels.

This professional training is modeled on the principles of adult learning and competency-based training. In addition, the program emphasizes field activities, an in-service project which is conducted at the participants' workplace, thereby creating an avenue for the application of skills and competencies gained during the course of the didactic session and mentorship by experienced mentors. The mentorship

includes a supervisory visit to be conducted by faculty members and program staff mentors to assigned participants' place of work.

This model is also partly related to the Field Epidemiology Training Program (FETP) principle of 'learning by doing' which emphasizes on work-based training [25-27]. It provided a clear example of how the FETP approach can be adapted to health systems strengthening in resource limited settings. However, unlike the FETP where trainees spend 60-70% of the training period in the field [26,27], participants' were required to conduct projects in line with their current job descriptions, coopt other relevant personnel within their organization with EFMC support and mentoring, thereby improving the institutional capacity of the organization in which they work.

The aim of this paper is to share lessons learnt from the implementation of this in-service training model aimed at strengthening the capacity and competencies of health workers to monitor and evaluate health programs thereby improving the quality of health services across all levels in Nigeria. This paper, unlike other similar publications, also does cover the impact of the short course on the trainees' work and career progression. However a more detailed comprehensive evaluation would be made available in a subsequent study.

2. Methods

2.1. Settings

Excellence and Friends Management Consult (EFMC) is a specialist management consult that provides public health services, monitoring and evaluation services, human resources/personnel services; and consulting, training, mentoring and certification in various aspects of public health and project management, leadership and system strengthening, located in Abuja Nigeria. EFMC also works with organizations to build and reengineer systems, develop human resources for health as well as mentor relevant personnel in effective management of resources, delivery of projects and monitoring/evaluation of funded activities. The mission of EFMC is to build an African state where success is not a myth but a reality through empowered Africans using world class systems, and her vision is Empowered Africans; Emancipated Africa.

The paper contains experience gathered from interactions with the trainees, supervisory visits to trainees' place of work, and analysis of program data and outputs (Trainees' project, background information etc.).

2.2. Program Context

The main objective of the program course was to develop a new cadre of public health workforce that is able to plan, monitor, and evaluate public health interventions and make recommendations, using a systematic competency-based training model - a tailored model- that empowers trainees' with skills and competencies in program management,

monitoring and evaluation, and leadership, for implementation and sustainability of health interventions in Nigeria. In order to produce a tailored module to address the critical need in program management, monitoring and evaluation within the country, a training needs assessment was conducted for employers and employees of various government, non-government and private institutions involved in public health programs in Nigeria. The focus of the need assessment was to ascertain the gaps faced by all level of health workers in program management, monitoring and evaluation of health programs within the country. The data were then analyzed to provide tailored modules to meet the felt need of potential trainees and their employers.

Initiated in 2012, the professional program management and professional monitoring and evaluation short courses were targeted at Nigerian public health professionals involved in program management, monitoring and evaluation of PEPFAR, Global Fund and other bi/multilateral funded HIV/AIDS programs and other public health programs in Nigeria. The trainees were drawn from staff of the Ministry of Health (Local, State or Federal), Non-Governmental Organizations (NGO), Community Based Organizations (CBO), Faith Based Organization (FBO) and other implementing agencies in Nigeria who are responsible for program management, or have substantial M&E role in their project or program. The course was designed to ensure that each participant is able to organize and steer projects and evaluations in such a way that they contribute to accountability thereby adding value to their organizations and thus improving public health in Nigeria, only individuals who were employed were admitted into the course. Trainees were expected to be fulltime employees. To ensure that every trainee would have a healthy supportive environment to conduct the project component and to secure organizational commitment to the trainee's work-based project; each trainee was required to tender a letter of commitment from their institutions before they were offered admission into the trainings. This letter authorized the trainee to attend the face-to-face didactic sessions of the program and to return to their workplace for the in-service project components.

2.3. Training Approach

Following the course advert through several print and electronic media, including the paper media, online training boards, and email dissemination, interested and well-motivated trainees were identified, screened and admitted based on their fulfillment of all eligibility requirements. Most participants had knowledge of basic epidemiology and biostatistics with at least a Bachelor's degree in relevant or related fields. The program attracted public health workers at all levels including senior- and mid-level managers, coordinators, supervisors and program officers. There were two main courses – Nigerian Professional Monitoring and Evaluation Short Course (NPMEC) and HIV and AIDS Program Management Short Course (HAPMSC) with three and five basic components respectively (Tables 1 and 2). The 7-days didactic introductory lecture, which was residential,

had trainees experience a face-to-face contact with members of faculty. It was conducted using a mix of lectures, group work, discussions, stimulated scenario and practical activities including HIV related case studies and trainees self-developed cases. The trainees were introduced to several concepts in program management, monitoring and evaluation including project management, leadership issues in projects,

team management, problem analysis, logical and other frameworks for planning and M&E systems; design of program evaluations; development and use of indicators, combination and use of data collection methods to obtain and interpret program evaluation data; and communication of evaluation findings persuasively for maximum impact; amongst others.

Table 1. Project Life Cycle of the 3-Month Professional Monitoring and Evaluation Training Program

Program Life Cycle of the 1st Professional Monitoring and Evaluation Short Course (July - September 2012)			
Phase	1st Didactic Session	Supervised Project/Field Work	Project Development and Presentation
Duration	1 Week	10 Weeks	2 weeks
Location	EFMC Complex Abuja	Trainees' Workplace	EFMC Complex Abuja
Outputs	Training Deliverables	Project Progress Report	Oral Presentation of Project and Final Project Report

Table 2. Project Life Cycle of the 6-Month Professional Monitoring and Evaluation Training Program

Program Life Cycle of the 2nd Professional Monitoring and Evaluation Short Course (April - September 2013)					
Phase	1st Didactic Session	Supervised Project/Field Work	2nd Didactic Session	Supervised Project/Field Work	Project Development and Presentation
Duration	1 Week	10 Weeks	1 Week	10 Weeks	2 weeks
Location	EFMC Complex Abuja	Trainees' Workplace	EFMC Complex Abuja	Trainees' Workplace	EFMC Complex Abuja
Outputs	Training Deliverables	Project Progress Report	Participants Mid-Project Report presentation	Project Progress Report	Oral Presentation of Project and Final Project Report

The second component which was a 10-week supervised field based M&E related project, had trainees return to their workplace to implement an approved project. Trainees were required to constitute a project team with members from relevant units/departments in their organization for the execution of their approved project. This cycle was repeated following another 7-day field works presentation and advanced course training for the 6-months course. As leadership is a fundamental building block of Human Resources for Health [28], the second didactic for the six months course was focused on health program management and leadership. The second 10-week project period provided an additional time for participants to complete their individual projects, carry out a statewide group project, produce results and evaluate some outcome of their projects.

The final component of the course was a 2-week project development and presentation period in which trainees finalized their project write up, prepared an oral presentation of their product which consisted of key findings and lessons learned from their M&E projects and made presentations to a wide group of public health professionals and national key decision makers.

In a bid to promote sustainability of project gains, trainees were requested to submit a project proposal for an additional 3-month post-training project, for seed grants. The grant selection criteria were based on the quality of the project with respect to the need and capacity of the trainees' organization. This became necessary as funds were inadequate to finance all projects by trainees. 10 trainees were awarded seed grant for the *institutionalization* of their project works.

2.4. Monitoring and Evaluation of Program

As part of the training, there were pre and posttest exercises before and at the end of each didactic class,

supervisory visits were conducted for trainees by mentors and program staff, to check on the progress of project implementation and assess the level of project integration into other organizations' activities. Every trainee was expected to be visited at least once. During such visits, discussions were held with the management of the Trainee's organization with regard to the purpose of the training, the support available to the trainee to complete the project and any prospects for scale-up of project activities initiated by the trainee, to other departments of the organization. Also, issues pertaining to the challenges experienced by trainees during project implementation and how the trainees tried to resolve them were discussed and solutions suggested by mentors and program staff. A supervisory checklist was administered during the course of the visits and relevant information documented.

A post course evaluation was conducted in June/July 2014 to ascertain the impact of the course on the career and work packages of the trainees.

3. Results

Two professional courses – Nigerian Professional Monitoring and Evaluation Short Course (NPMEC) and Professional HIV/AIDS Program Management Short Course (HAPMSC) were conducted over a period of 3 –months and 6 –months respectively in 2012 (July – September 2012) and 2013 (April – September 2013). A total of 118 trainees (M= 72, F= 46) were admitted into both courses. These were drawn from 26 of 37 (including the Federal Capital Territory) states spread across the six geopolitical zones of Nigeria, representing 66 organizations including Federal, State, Local government agencies, non-governmental organizations, and other private establishments. 103 trainees (87%) completed the course successfully i.e. submitted all training deliverables

including an end of project report (Figure 1). Of the total admitted trainees, 57 (48%) were Doctors/Nurses, 30 (25%) were social scientists, 13 (11%) were Laboratory Scientist, 10 (8.5%) were Data officers/managers, the rest came from other health management profession. 89 (75%) of trainees were supervised at their workplace. Others could not be reached because of the mobility of their work which saw them mostly in field stations most of the time. NGOs represented the highest employers of trainees with 42% (Figure 2), while other trainees were being employed by the Federal Government (40%), State/Local Governments (15%) and Private institutions (9%). The completion rate increased from 83% in 2012 to 95% in 2013, a gain attributed to the extension of the course duration from 3 months to 6 months. All trainees showed evidence of application of acquired skills in their current job positions.

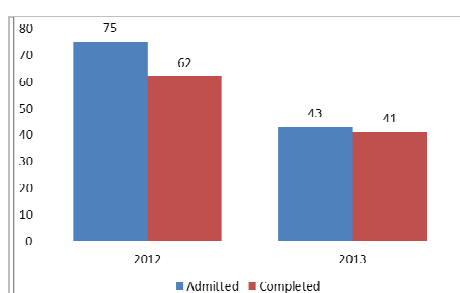


Figure 1. Number of trainees admitted and those who completed the program 2012-2013

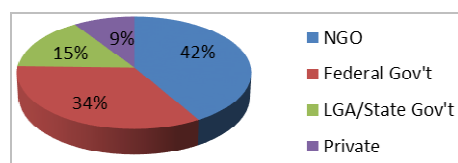


Figure 2. Distribution of completed trainees according to class of organization

3.1. Project Outputs/Outcomes

All trainees who completed the course submitted the training deliverables which included: a Project Idea, Work Plan, Case Method, Problem and Objective tree, Log Frame Matrix, Monitoring Plan, Evaluation plan, Evaluation Term of Reference and an updated Case Method. Altogether trainees implemented 103 approved projects which were mostly self or host institutional financed. The projects included; establishment and strengthening of Monitoring and Evaluation framework and systems; Improving HIV Testing and counseling; Improving Treatment of HIV/AIDS, and other related services; Improving tuberculosis (TB) Management; Improving Data management and reporting, improving clients enrollment systems among others (Table 3). Two trainees through their projects created new M&E departments in their places of work. Trainees in filling the final training evaluation expressed their gratitude for the course, stating how their skills and competencies have improved over the course of the professional training and emphasized the need to scale it up to include more health workers to further fast track the improvement of the quality of health services in Nigeria.

According to a participant, the training could be described in just two words: “*LIFE CHANGING*”. Another graduate of the course had this to say, “*A very useful opportunity that has transformed my health management experiences from being a spectator to being an active team player in all aspects of health management.*” Yet another said, “*Spiritual awakening, emotionally refilling, intellectually challenging, physically exhausting yet exciting. I love this course.*” An excited graduate of the program left behind these words, “*GREAT! I will make a difference.*”

Table 3. Sample Participants' Project Topic and Contact

S/N	Project Topic
1	Reduction in Number of Complicated Cases of HIV/AIDS at Defence HQ Medical Centre, Mogadishu Cantonment, Asokoro, Abuja, Nigeria
2	Strengthening Monitoring and Evaluation System for HIV Post Exposure Prophylaxis in Ekiti and Ondo States.
3	Improving HIV Counseling, Testing and Referral Services at Goodnews Diagnostic Centre, Abuja.
4	Improved Attendance of Support Group at General Hospital Aboh-Mbaise; Imo State.
5	Improving HCT services in 3 PHCs in Kwara State, Nigeria.
6	Monitoring and Evaluation Framework and Formative Evaluation Report of the HIV/AIDS Community Mobile Enlightenment and Testing Program of the Community Medicine Department of Federal Medical Centre, Ido-Ekiti.
7	Improving the Uptake of HTC amongst Antenatal Clinic Attendees at Umuneke PHC, Imo State.
8	Development of Monitoring and Evaluation Plan for WCDHRI PMTCT Activities in Ekiti State, Nigeria.
9	Assessment of Non Adherence of People Living with HIV/AIDS to Antiretroviral Therapy in Federal Medical Centre Keffi
10	Integrating HIV Testing and Counseling into Family Planning centers in Ibadan, Oyo State.
11	Rising Incidence of Treatment Failure Among Patients Commenced on Highly Active Anti-retroviral Treatment (HAART) in Aminu Kano Teaching Hospital, Kano (AKTH)
12	Reducing defaulting ART clients in Specialist Hospital Jalingo, Taraba State.
13	Increase in number of People Living with HIV/AIDS on treatment, switching from 1 st to 2 nd line anti-retroviral therapy in Defense Headquarters Medical Center, Mogadishu cantonment, Asokoro, Abuja.
14	Discrepancy in Data Management.
15	Emphasizing Reproductive Health issues and HIV/AIDS prevention to Youths from a Religious Perspective in Abia State.
16	HIV/AIDS Awareness Initiative for Zamani Community (KIP).
17	Strengthening Logistics and Adverse Drug Reaction Reporting in ART Pharmacy of Sir Yahaya Memorial Hospital, Birnin Kebbi.
18	Monitoring and Evaluation Intervention to Improve the Uptake of HIV Testing, Counselling and Referral Services in Yemetu Catchment Area of Ibadan North Local Government Area of Oyo State.

S/N	Project Topic
19	Addressing Documentation Problem in Rasheed Shekoni Specialist Hospital Laboratory Dutse, Jigawa State.
20	Improved Collection of Data on HIV/Tuberculosis Cases.
21	Provision of Sustainable HIV Services in Amauzari Autonomous Community in Isiala Mbano Local Government Area of Imo State.
22	Improved HIV Counseling on Admission to National Hospital Abuja (NHA).
23	High Compliance/good Adherence by Female sex workers (FSWs) to Minimum Prevention Package Intervention (MPPI) in Anambra, Enugu and Ebonyi states of Nigeria.
24	Tracking of Blood Donors Reactive to HIV at the Blood Bank University College Hospital, Ibadan.
25	To Improve Work Ethics amongst Staff at General Hospital Aboh-Mbaise, Imo State.
26	To institute Proper HIV/AIDS Data Representation of Global Fund Facilities in Kwara State on the National DHIS Platform.
27	Use Of IPT in HIV Patients in Federal Medical Centre Umuahia, Abia State.
28	Addressing the Problem of Low Uptake of HTC Services in BHC Kwali, Abuja.
29	Increase uptake of full ART services by post natal PMTCT women & their HIV exposed infants at Comprehensive Facilities
30	Improving Level of Facility Delivery among HIV Positive Pregnant Clients in PHCs Deidei and Kagini, Abuja.
31	Improvement of Usability of Laboratory Result in HIV/AIDS Management in Federal Medical Center Birnin Kebbi.
32	Improving Documentation and Storage of Documents and Records in 16 MELTNA Supported ART Laboratories.
33	Evaluation of the Anti-Retroviral Therapy (Art) Programme at the Comprehensive ART Centre, Agbor, Delta State, Nigeria.
34	Poor Management of TB-HIV patients at Braithwaite Memorial Specialist Hospital, Port-Harcourt, Rivers State - Case Study.
35	Reduction of Default Rate among the TB – HIV Co – Infected Patients in the Federal Medical Centre, Ido – Ekiti, Ekiti State.
36	Engaging People Living with HIV/AIDS (PLHIV) As Counsellors and Follow Up Focal Persons at the Community Mobile HTC for increased number of Enrolment into Care.
37	The Uptake and Effectiveness Of PMTCT Services In FMC Keffi, Nasarawa State.
38	An Evaluation of Mother-Child Pair Loss to Follow Up (LTFU) in Prevention of Mother to Child Transmission of HIV (PMTCT) Programme at APIN Adeoyo Maternity Centre, Ibadan
39	Reducing the incidence of female students as sex workers and re-establishment of a functional HTTC in the Medical Centre of the University of Nigeria, Nsukka, Enugu State
40	Poor HIV Management By Private Hospitals in Lagos
41	Disclosure of HIV Status to Sexual Partners among HIV Positive Clients at Benue State University Teaching Hospital, Makurdi.
42	Decreasing the Rate of Paediatric Loss to Follow Up in the Nigerian Institute Of Medical Research-APIN Clinic, Lagos
43	Poor Mobilization and Capacity Building of FCT Underserved Communities To Prevent Transmission HIV/AIDS Infections

3.2. Post Training Survey Results

This post training survey was conducted from 24th June 2014 to 16th July 2014. Of the 118 participants trained, only 33 participants responded to the survey which represents only 27.96% of the trained. The low response rate was largely due to changes in the e-mail addresses of the participants (as most of them had only their official e-mails) in the data base.

About three quarter (73.5%) of the respondents were male. Fourteen (41.18%) of the respondents participated in the Nigerian Professional Monitoring and Evaluation Short Course (NPMEC) and 57.6% in HIV/AIDS Program Management Short Course (HAPMSC). The lower response of the NPMEC graduates could be as a result of prolonged lag between training and survey as the average number of months from course attendance to month of survey was 21 and 9 months for NPMEC and HAPMSC respectively.

Of the 34 respondents, 22 (66.7%) agreed that the training has within the period under review positively changed their jobs. Some changes identified by respondents include (1) Securing new jobs with the knowledge acquired; (2) Use of problem tree to solve problems and strategize; (3) Evaluation of work plans and distribution using M&E indicators to measure outcomes; (4) Moving from the position of a data entry clerk to the position of a Strategic Information Associate; and (5) Change of job description and portfolio which include more interfaces with government agencies and oversight function on “I was elected the president of my association which is the after I gave them talk on leadership. I was practically asked to lead the association. I defeated a Director, Perm Sec, and several other key personalities to

clinch the position after putting what I learnt from HAPMSC into practice.” Another said, “Shortly after the NPMEC program I got a job with a Medical Logistics organization in 2012 as a Laboratory Logistics Advisor to monitor the distribution of lab commodities to about six states and almost 3600 health facilities in Nigeria for an Implementing Partner, later I joined an International NGO in 2013 as a Clinical Laboratory Systems specialist to monitor and implement a laboratory USAID-funded project in a State in the northern part of Nigeria and now I am with another organization as State Logistics advisor in Northern Nigeria to supervise, monitor and evaluate the supply chain aspect of the program. NPMEC experience in M & E really helped me.”

Of all the topics covered, the ones that made the most difference in participants’ lives and widely used were the three P’s to success (Prayers, Purpose and Pursuits), Project management, Case method, Data management, Indicators development and definition, Logical frame work matrix, Monitoring and evaluation, Project life cycle, Personal effectiveness, Self-management, and Leadership and management. The second most relevant topics were Leadership challenges in Africa, Evaluation process, Politics and mentorship, Time management, Risk management and Research. The topics least used by participants were MS project, Qualitative and quantitative study design, Advocacy skills, Score card and Strategic planning. The participants rated the course high as according to them, the courses used “effective delivery techniques and work groups”, “the training were well organized and professionally delivered”, “good quality of course Module” and “the use of Case studies to aid the understanding of principles”.

On ways to make the course better, the participants had this to say, “There should be unbiased selection of participants”, “The materials should be printed into books for people to read”, Partnership with a degree awarding institution will add more to the certificates issued”, The length of time for the courses was too short for participants to fully grasp the concepts”, The learning process should be made more practical”, and “Keep up the good work”.

Although the participants agreed that the courses and their presentation were impactful, they however recommended partnership with degree awarding institution which they believe will add more value to participants, addition of more practical topics or field exercises to some courses, consistent upgrading of all the courses, and provision of regular refresher courses with time. As the course was fully funded, there was no complains on cost of the course, venue of training nor on other logistic issues, it was generally held opinion that that the length of the courses were too short.

4. Discussions

According to the 2004 World Development Report without improvements to the health workforce, the health-related Millennium Development Goals cannot be achieved [29]. Also In-service training has been proven to be a key strategic approach to addressing the severe shortage of health care workers in many countries [14].

The EFMC professional program management, monitoring and evaluation short course, seeks to contribute to the Human resources of Health stock in Nigeria, which has been said to be critical [12]. Our experience shows that there is dire need for a new crop of program managers with skills and competencies to monitor and evaluate programs for accountability of project budget execution, evidence-based planning and improving the health services and outcomes of Nigeria.

Our training program enhances the capacity of course participants to criticize, evidently plan, monitor, and evaluate health programs and management processes as well as systems through the initial didactic residential session. The supervised project work gave opportunity to trainees to implement all they have acquired during the didactic interactive sessions, at their place of work. To improve institutional capacities, trainees were required to implement projects which were in line with their current positions in their organization and to constitute a team with members from their unit/department as well as other possible stakeholders in the organization with the capacity to influence the project implementation and outcomes. This strategy was found to be productive as funds were not available for implementation of trainees’ projects from the program and it had the potency to sustain the gains of the trainee’s project. The trainees did not only gain the support of the relevant stakeholders, some actually received additional funds from their organization to execute their projects.

The on-site supervisory visits conducted by program staff and faculty members, was a reinforcing mechanism which

also produced excellent results. Some trainees who experienced bureaucratic bottlenecks and organizational system issues received momentum from EFMC on site monitoring and supervision to continue with their project implementation and to complete their work. Some of these issues which included; availability of funds for projects, projects being regarded and viewed as trainee’s project rather than a means of improving the organization’s capacity. With the visit of the experienced program staff and mentors, most of these issues were addressed with the management of the respective organizations which led to the completion of project work of some trainees. Similar model of In-service training have been experimented elsewhere and have produced similar results. This include; The Gambia [30], Nicaragua [31], Liberia [32], and Uganda [3].

This training further exposed the need of a new cadre of health workers with professional program management, monitoring and evaluation skills and competencies in Nigeria. Most of the participants trained had little or no previous knowledge of program management although a number of them were in management positions. But after, the training, they were able to apply the knowledge gained to their workplaces to strengthen their program management systems while some changed jobs to handle more challenging positions.

5. Challenges

One challenge faced during the course of the program execution was providing funds for the trainees’ project as covered by other similar work-based training [3]. Even though in 2012 the program provided seed grants to 10 successful trainees to conduct a 3-month post-program project, it became unsustainable afterward to continue in that trend. For the unavailability of funds and a need for sustainability, trainees were required to execute project which was in line with their current job description and to source for funds from their organization, while the program supports in every other way to make the project implementation successful. This strategy worked resulting in over 95% project completion in 2013.

The program also faced a challenge in the supervisory visit of trainees at their workplace. It was difficult to get the program of the trainees and that of the program staff to align sufficiently in order to stage a visit at trainees’ post. Most trainees were either away on official assignment or unavailable for a visit due to the volume of their work, at the point when the program staff were ready to visit. As program staff had also assignment outside the training program, it became almost impossible to meet with all the trainees in their workplace. However, to mitigate this, trainees were frequently in touch with their mentors and other faculty members through phone calls, emails and other technological means and so were able to complete their projects with the necessary guidance and mentorship required.

The movement of some trainees to other organization before the end of the program was partly responsible for the

disparity between admitted trainees and those who successfully completed the program. Also the change of jobs as a result of improved knowledge and skills from the training made a number of official e-mails invalid by the post course evaluation period. This will be resolved in future trainings by requesting for additional private e-mails from all participants.

6. Limitations

This paper talks about the Nigeria professional program management, monitoring and evaluation short course training process and presents no basis for the long term evaluation of the impact of trainees' projects on their institutions. Such work would require a rigorous evaluation of the outcome of all the trainees' projects and is outside the scope of this paper.

7. Conclusions

This study represents a proof-of concept of the effectiveness of professional in services competency based trainings in monitoring and evaluation in Nigeria to build a new cadre of health care professionals with necessary skills and competencies to manage, count, collate, analyze, and report figures from various public health interventions in Nigeria. Support for this training will help develop a critical mass of individuals who will jumpstart the generation of reliable data from Nigerian public health interventions for evidence based decisions and programming.

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