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Assessment of in-service training and continuing education (IST/CE) for frontline health workers in Bauchi and Cross River states, Nigeria

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ASSESSMENT OF IN-SERVICE TRAINING AND CONTINUING EDUCATION (IST/CE) FOR FRONTLINE HEALTH WORKERS IN BAUCHI AND CROSS RIVER STATES, NIGERIA



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List of Acronyms

CE	Continuing Education
CHEW	Community Health Extension Worker
CHO	Community Health Officer
FGD	Focus Group Discussion
FLHW	Frontline Health Worker
FMoH	Federal Ministry of Health
HRH	Human Resources for Health
ICT	Information and Communication Technology
IST	In-Service Training
KII	Key Informant Interview
LGA	Local Government Area
M&E	Monitoring and Evaluation
MoH	Ministry of Health
NGO	Non-Governmental Organization
PHC	Primary Health Care
SMoH	State Ministry of Health
SPHCDA	State Primary Health Care Development Agency
WHO	World Health Organization

Executive Summary

Introduction

Training contributes tremendously to the development and sustenance of health workers' competencies for quality health care services. Although Nigeria has a higher stock of human resources for health compared to other African countries, the World Health Organization argues that its distribution is highly skewed towards urban areas.¹ Extant health worker staff also cannot provide top quality health services, due in part to inadequate skills and poor opportunities for capacity-building. Building and maintaining staff capacities requires continuing professional development through in-service training (IST) and continuing education (CE).

The extent to which frontline health workers (FLHWs), in particular nurses, midwives, community health officers, community health extension workers, and junior community health extension workers, receive these trainings is not documented in Nigeria's Bauchi and Cross River states. These FLHWs comprise an important portion of these states' human resources for health, playing a critical role in preventative and curative health care services for mothers, newborns, and children, in primary health care settings. This study assesses current IST and CE for health workers in Bauchi and Cross River states to provide evidence to inform policy and planning and improve implementation of capacity-building for health workers in Nigeria.

Methodology

The study utilized a mixed methods design, employing quantitative and qualitative methods for data collection in Bauchi and Cross River states. Qualitative data were collected in focus groups and key informant interviews with 20 policymakers and stakeholders in each state, and 60 health facility and service delivery unit managers, followed by transcription of the interviews and coding. Thematic analysis used NVivo software to identify emerging themes and sub-themes. The quantitative component involved interviews with 218 health care workers in Bauchi, and 239 interviews in Cross River. Checklists were also administered to currently active IST and CE providers for health workers and their professional associations in Bauchi and Cross River.

Findings

Cross River State

While most FLHWs were aware of IST or CE programs for their professions, about one quarter of respondents had never participated. The most frequently covered topics in IST and CE are HIV/AIDS (66.2%), immunization (54.5%), maternal health (51.9%), family planning (50.6%), and child health (47.4%). FLHWs identified seniority, personal relationships, gender, and area of origin as factors influencing selection for IST and CE. Female respondents feel that pregnancy, childbirth, and maternity can disadvantage them for selection. Over one third of respondents consider the selection process as gender-blind. Most respondents indicated an inability to determine the type of training they require or receive. Most FLHWs indicated that they have never been sponsored for these opportunities, and about one third have sponsored themselves.

Bauchi State

As in Cross River, most FLHWs in Bauchi were aware of IST or CE programs for their professions, but about one quarter had never participated. The most frequently covered topics in IST and CE are HIV/AIDS (50.3%), family planning (48.3%), child health (45.6%), immunization (37.6%), and maternal health (36.2%). FLHWs identified seniority, area of origin, gender, and personal relationships as factors influencing selection for IST and CE. Female respondents felt that childbirth, maternity leave, and family responsibilities disadvantaged them for selection. Over half of respondents consider the selection process gender-blind. More than half of respondents indicated not being able to determine the type of training they require or receive. Most FLHWs indicated that they have never been sponsored for CE, while about one quarter had sponsored themselves.

¹ World Health Organization: Working Together for Health. The World Health Report 2006. Geneva. 2006

Recommendations

This assessment provides recommendations to increase the efficiency, effectiveness, and sustainability of IST and CE for FLHWs in these two states. These recommendations include: improved collaboration and coordination among implementing partners implementing different forms of IST for FLHWs; more current and cost-effective training mechanisms; improved funding for more effective IST and CE; periodic evaluation of training effectiveness; improved links between CE and pre-service education in health training institutions; sustainability plans by implementing partners that guarantee transition of current trainings to more sustainable sources of funding; a training information management system and database to track key aspects of IST, including frequency and types of IST and CE available to FLHWs. Furthermore, there is a need for an IST and CE policy and strategy—and a corresponding budget.

The selection process for IST and CE should be objective, fair, and transparent. Funds to sponsor workers' CE should be released in a timely manner to enable their focus on studies. Letters of "release" for CE by health workers' supervisory agencies should be issued promptly as well. Mechanisms for health workers' career progressions, for different cadres, need to be developed and implemented.

Conclusions

Budgetary provisions for IST and CE of health care workers in Bauchi and Cross River states should be improved for effective FLHW capacity-building. To enable trained health care workers to properly employ their acquired knowledge and skills, health centers need to be adequately equipped, and better working conditions should be created at more health facilities, especially in rural areas. Lastly, IST and CE should be mandatory for all health workers, including those at the front lines—FLHWs—to build their capacities for top quality and most effective health care services.

Introduction

Despite modest gains in the health of its women and children, Nigeria still ranks among countries with the highest child and maternal mortality rates.¹ The country's infant and under-five mortality rates in the 2013 National Demographic and Health Survey (DHS) suggest that one in every 15 Nigerian children do not survive their first year, and one in every eight children dies before the age of five.¹ There are regional differences in maternal mortality ratios, with more deaths reported in Nigeria's north than in the south.¹ Maternal, newborn, and child health (MNCH) service delivery can effectively be delivered by skilled, well-trained and motivated health workers, but Nigeria has inadequate numbers of skilled workers due to staffing shortages as well as inequitable distributions within their cadres.² Nigeria is one of 36 sub-Saharan countries experiencing a health workforce crisis and shortage of skilled medical personnel, especially in primary health care. Sub-optimal numbers of health workers and inappropriate skill sets are most pronounced in Nigeria's rural and remote regions, where 52 percent of the population lives.³

Primary health care (PHC) is the first contact for patient care in a health care system. Frontline health care workers (FLHWs) play a critical role in preventive and curative health services to mothers, newborns, and children in Nigeria's PHC settings.⁴ While Nigeria has some of Africa's most significant human resources for health (HRH), there are great disparities in health status and access to services within the country's six geopolitical zones.⁵ Nigeria's maternal, newborn, and child health (MNCH) indices are typically poorer in rural areas, with maternal mortality estimated at 828 deaths per 100,000 live births in rural areas and 351 deaths per 100,000 live births in urban areas.⁶

Nigeria is among 57 countries identified by the World Health Organization (WHO) with an HRH crisis due to insufficient health care providers. Major HRH challenges in Nigeria include worker shortages, especially in the north; excessive attrition; recruitment challenges; poor skills and their distribution among different worker cadres; salary and other conditions of service discrepancies among states; and lack of alignment between pre-service and training programs and health priorities.⁷ Addressing unmet MNCH needs requires investment and strengthening of national and state health systems, especially in underserved and remote areas. The HRH crisis is a critical factor in the poor performance of Nigeria's health systems in these settings.⁸

Although in-service training and continuing education (IST/CE) programs have been implemented in different parts of Nigeria, policies and guidance for planning, coordination, and quality assurance are not standardized. Current training and capacity-building needs for health workers have not been assessed in Bauchi and Cross River states. There is no doubt that IST and CE, as training mechanisms, contribute to the development and sustenance of health worker competencies for quality health care services. For these mechanisms to be more effective in Nigeria's health sector, the Population Council embarked on a study to assess IST and CE for FLHWs in Bauchi and Cross River. This assessment aims to enable local IST and CE providers, with development partners and stakeholders, as well as their beneficiaries, to systematically reposition these services for maximum health sector results.

Justification for the Study

In-service training and continuing education (IST/CE) encompass all health worker activities (both formal and informal) for maintaining, updating, developing, and enhancing professional health workers' skills, knowledge, and attitudes. IST/CE is a systematic and ongoing process of education and learning that builds upon initial pre-service education and training to ensure continued competence and continuous knowledge and skills for new responsibilities or changing roles, to increase personal and professional effectiveness.⁹ To be effective, IST and CE programs should be based upon assessed needs and gaps for every worker cadre. Although some skills are required by all cadres, such as leadership, program management, and communication, each cadre within direct MNCH service delivery requires specific skills. Tools for systematic assessment of the training needs of health workers, in general, as well as for FLHWs, are hard to come by. It has become imperative to periodically assess FLHWs' knowledge and skills for satisfying the health care needs of patients and clients, in a gender-sensitive way, in Bauchi and Cross River. This assessment will enable the **Enhancing the Ability of FLHWs to Improve Health in Nigeria** project to make context-appropriate recommendations to improve the IST and CE opportunities of key FLHWs, especially in Bauchi and Cross River.

Aims and Objectives of the Study

Aim of the Study

The aim of this study is to assess current IST and CE for key FLHWs in Bauchi and Cross River. This entails understanding the nature of existing IST/CE, its providers and recipients, as well as funders in both states.

Specific Objectives

1. Determine policymakers' and stakeholders' definitions (and understanding) of IST/CE
2. Identify the providers and funders of IST and CE
3. Determine the characteristics of IST and CE recipients
4. Delineate existing procedures and resources for IST and CE support
5. Assess monitoring systems for IST and CE
6. Ascertain whether IST and CE are demand- or supply-driven
7. Identify facilitating factors, challenges, and opportunities (including gender-related issues), and
8. Determine how routine training needs assessments can be institutionalized.

These objectives were developed specifically to provide evidence to inform policy, planning, and more effective implementation of IST and CE for key FLHWs in Bauchi and Cross River states.

Research Questions

1. What is the present situation and substance of IST and CE for FLHWs, especially for providers, funders, and recipients in Bauchi and Cross River states?
2. What processes, resources, and strategies exist in both states to support and monitor IST and CE in Bauchi and Cross River? Is IST/CE demand- or supply-driven in these states?
3. What are the contextual factors, challenges, and opportunities (including gender-based issues) that affect IST and CE in Bauchi and Cross River? How can routine training needs assessments for key FLHWs be institutionalized in both states?

Methods

Study Sites

The study was conducted in both Bauchi (North-East) and Cross River states (South-South) (Figure 1) of Nigeria. Both states were selected for the study because they are focal states for the HRH **Enhancing the Ability of FLHWs to Improve Health in Nigeria** project and offer the possibility of contrasting data from the two states, which are geographically and culturally varied, although both states' MNCH indices and HRH situations are poor.



Figure 1: Study Location (Bauchi and Cross River States)

Study Design and Population

This assessment utilized a cross-sectional, mixed-methods study design with key informant interviews (KIIs), focus group discussions (FGDs), and a survey. The mixed-methods design includes descriptive, exploratory, and convergent models. The study population includes policymakers, health facility and service delivery unit managers, key FLHW cadres, IST and CE providers, and officials of health professional associations. Female participants were purposively included in FGDs. Policymakers, health care provider employers, and other IST and CE stakeholders served as key informants—20 in each study state. Stakeholders included:

- Officials of the Federal Ministry of Health (FMoH) and related departments and agencies responsible for HRH
- Officials of Bauchi and Cross River state ministries, departments, and agencies responsible for HRH
- Officials in charge of state and private pre-service health training institutions in Bauchi and Cross River
- Selected local government area (LGA) councils in Bauchi and Cross River, through their PHC departments
- Regulatory agencies, primarily the Nursing and Midwifery Council of Nigeria and Community Health Practitioners' Registration Board, and
- Other key stakeholders managing HRH activities in the states.

Sample Size

Quantitative Survey of Health Workers

The sample size was obtained assuming a 50 percent previous attendance at IST and CE programs, desired relative precision of five percent, and 10 percent adjustment for anticipated non-response. The minimum sample size was obtained as follows:

$$n = Z^2pq/d^2$$

where: n = minimum sample size

Z = Standard normal deviate which is 1.96

p = proportion of health workers that have attended a previous IST or CE program.

The complementary probability of 'p', (1-p) is 'q'.

d = absolute error or precision taken as 5%.

A minimum sample size of 384 was calculated for both states. To increase robustness and account for non-responses, a 10 percent non-response estimation was added, for a total sample size of 424 for the two project states. Therefore, it was estimated that the structured questionnaires were to be administered to a minimum of 212 health workers in each state. Inclusion criteria were “female or male health worker who has been working in the selected PHC facility in the last 12 months prior to the study, providing MNCH services in the selected PHC facility and consenting to participate.” Exclusion criteria were “FLHWs on leave or who have travelled out of the local government area (LGA), or are unavailable during the study period, or did not consent to participate.” The sample size of 212 FLHWs was allocated proportionate to size, taking into consideration the number of existing health care workers in the three senatorial districts of each state, as well as ensuring that:

- Two LGAs, one urban and one rural, were selected using simple ballot from the north senatorial district both States
- Two LGAs, one urban and one rural, were selected using simple ballot from the central senatorial district of both states, and
- Two LGAs, one urban and one rural, were selected using simple ballot from the south senatorial district of both states.

During field work and the data collection process, 218 health workers were interviewed in Bauchi, and 239 health workers were interviewed in Cross River. Table 1 outlines the number of study participants for the survey, disaggregated by LGAs in the two states.

Table 1: Study participants in each State and LGAs

Cross River		Bauchi	
LGAs	Respondents n (%)	LGAs	Respondents n (%)
Abi	36 (15.1)	Ningi	37 (17.0)
Bekwarra	38 (15.9)	Shira	36 (16.4)
Biase	45 (18.8)	Bauchi	37 (17.0)
Calabar Municipal	43 (18.0)	Jama'are	35 (16.1)
Obudu	34 (14.2)	Dambam	35 (16.1)
Yakurr	43 (18.0)	Kirfi	38 (17.4)
Total	239 (100)	Total	218 (100)

Qualitative inquiry of stakeholders

Focus Group Discussions (FGDs)

A total of 16 focus group discussions (FGDs) comprised eight FGDs each in both states. In each state, four FGDs were conducted with a purposive sub-sample of health workers (with considerations for seniority, gender, and distribution); at least one FGD with health workers per senatorial zone and at least one FGD with only female health workers was conducted in each state. In addition, four FGDs with Health Managers and facility unit heads, with one FGD in each of the three senatorial districts in each state, and one FGD exclusively with female health managers and facility unit heads, were conducted.

Key Informant Interviews

A total of 20 key informant interviews (KIIs) were conducted in each state, mainly with senior officials with responsibilities connected to health worker IST and CE in Bauchi and Cross River. These officials selected for the KIIs included directors in the state ministries of Health, civil service commissions, LGA service commissions, and LGA PHC coordinators. Others included the directors of both State PHC Development Agencies (SPHCDA), hospital management boards, administration and medical services within each state's Ministry of Health, and officials of the National Association of Nurses and Midwives, National Association of Community Health Practitioners, and Community Health Practitioners Registration Board.

Checklists for health professional associations and providers of IST/CE

Checklists were administered to different health professional associations including the Nurses and Midwifery Council of Nigeria and Community Health Practitioners' Registration Board. In both states these registered health professional associations' members were administered an IST and CE checklist. In addition, all currently active IST and CE providers and funders in each state, including public and private organizations and development partners, were approached to complete a structured checklist.

Recruitment Procedure

Policymakers, health facility and service delivery unit managers, key FLHW cadres, providers of IST and CE, as well as officials of health professional associations were sent a letter of invitation. These letters were sent prior to the study to each state's Ministry of Health, hospital management boards, and SPHCDA, among others, informing them of the planned assessment. The letter explained the study's objectives and its importance. It clearly stated that participation was voluntary, and that non-participation would result in no consequences, with any participant's right to withdraw at any time without reason also noted. Assurance of anonymity was given, that no identifiers would link responses to respondents during documentation or reporting. Participants were informed what they need to do if they agreed to participate, stipulating the consent process and how the survey questionnaires, checklist, and KII and FGD guides were to be administered. Any risks associated with participation in the study were explained, along with the fact no inducements were to be offered. The estimated time it would take to complete the questionnaire, checklist, KIIs, or FGDs was also provided.

Development of Instruments: Key Informant Interview, Focus Group Guides and Survey Questionnaires

The tools for this study were developed based upon the objectives of the assessment and expected outcomes. KII guides were developed to capture senior officials' knowledge and perceptions of IST and CE, while the FGD guides were developed to capture health facility and unit managers' and health workers' knowledge, perceptions, and experiences of IST and CE for key FLHWs in each state. The survey questionnaire was designed with questions on FLHWs' IST, to be administered to health workers. Lastly, structured checklists were designed to be administered to IST and CE providers, as well as health professional associations, for these key FLHWs.

Preparation for Data Collection

Instrument validation

The data collection instruments were developed in English. The survey questionnaire was pre-tested in an LGA not among those selected for the assessment. Subsequently the questionnaire was finalized with responses from the pilot-testing. Data collection for the survey was utilized electronic data capture with personal digital assistants. Similarly, the qualitative guides for FGDs and KIIs were also pilot-tested. The structured checklist was finalized for use through a consultative process with different stakeholders prior to the assessment.

Training of Field Workers

Training of data collectors occurred prior to the start of field work. Training participants were government-employed monitoring and evaluation (M&E) officers in each state. Relevant State Ministry of Health (SMoH) officials, and those from other relevant ministries, departments, and agencies in each state's health sector served as supervisors for the assessment, in addition to four members of the qualitative research team. The training familiarized all 12 field workers with the objectives and methodology of the assessment, to ensure common understanding of the data collection tools—both quantitative and qualitative. Other objectives clarified the roles and responsibilities of the study teams, and role plays practiced administration of the survey questionnaires as well as application of the KII and FGD guides.

Data Collection Process

Local authorities, who had been previously informed about the survey, were contacted for their approval to conduct it in their area. In each state, a team of four data collectors and one supervisor was deployed to each senatorial district. M&E officers were posted to LGAs outside their normal area of duty to reduce bias. Each study team, upon arrival at their respective assigned LGAs, paid a courtesy visit to the PHC coordinator, who had also been informed of the study. Each study team was provided with a mobilizer to guide the selected health facilities' assessment. At each facility visited, health workers were administered the questionnaire. Survey data were collected on personal digital assistants, which were reviewed daily by supervisors before uploading the data to the electronic database specifically designed for the assessment.

Interviews were conducted with key informants, among stakeholders in each state. Heads of IST and CE provider organizations were approached to complete and return structured checklists. FGDs were held at health centers where discussants were working. KIs and FGDs engaged key stakeholders and health managers in discussions about IST and CE in their states, and their implementation frameworks, with detailed exploration of the IST and CE selection processes, IST and CE providers and their characteristics, their means of IST and CE delivery, their evaluation, and financing and coordination. A part of these discussions, gender was addressed, in terms of its inclusion or reference in existing IST and CE policy and guidance. Stakeholders from pre-service training institutions were also asked about how their curricula and training modules align and interact with FLHW IST and CE activities.

Data Processing and Analysis

Quantitative

Data were entered, cleaned, and descriptively analyzed based upon the objectives of the assessment using SPSS statistical software (version 23). Frequencies and percentages summarized categorical variables, while measures of central tendency and variation were used for numeric variables.

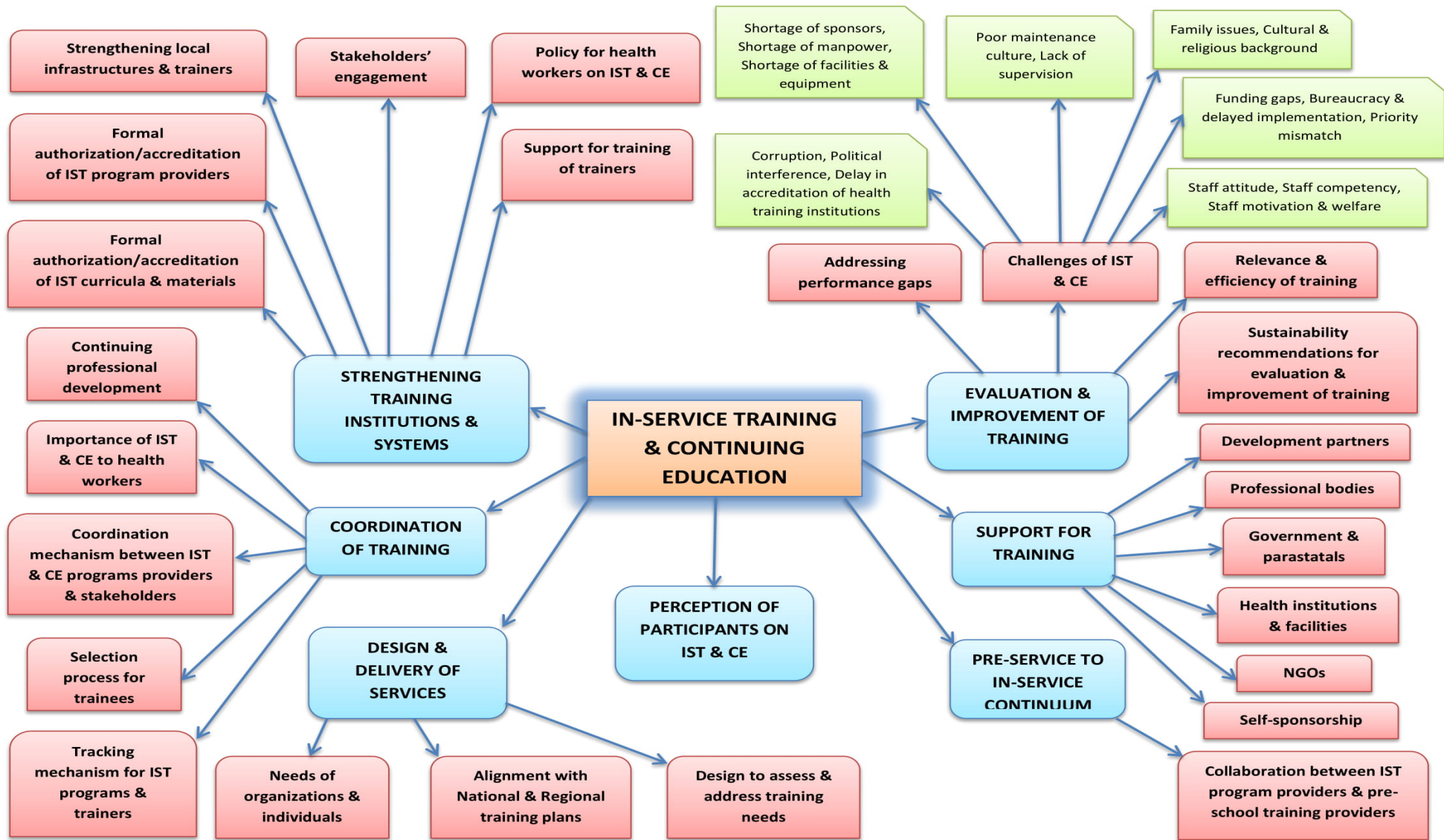
Qualitative

Interviews and FGDs were recorded digitally, transcribed verbatim, and transferred to NVivo 11 software for analysis. Thematic analysis was the analytical strategy employed, to explore emergent patterns and themes in the data. Members of the research team reviewed the qualitative data and contributed to the development of a thematic framework of codes, through consensus. Qualitative data were analyzed and discussed according to seven key themes: participants' perceptions of IST/CE, training coordination, service design and delivery, the training continuum from pre- through in-service, training institution and system strengthening, support for training and learning, and training evaluation and improvement. Most of these key themes had several sub-themes (see Qualitative Framework, following page).

Ethical Considerations

Ethical approval was granted by the Bauchi State Research Ethical Committee, Cross River State Research Ethical Committee, and Population Council's Institutional Review Board in New York. In addition, permission was sought from local, state, and LGA officials, as well as community leaders after a courtesy visit explaining the study's objectives and procedures. The study was conducted according to ethical guidelines and principles of confidentiality, beneficence, and voluntariness. Informed consent was obtained from each respondent prior to the interviews for the study.

Figure 2: Qualitative Framework



Results

Quantitative Findings

Socio-demographic and background characteristics of FLHWs

There were more female respondents in Cross River (85.8%) than in Bauchi (48.6%), with conversely more male respondents in Bauchi (51.4%), and considerably fewer in Cross River (14.2%). Respondents in the 30 to 39-year age range constituted the largest group in both states (Bauchi 40.8%, Cross River 37.7%). The smallest group in both States was within the age group of ≥ 50 years (Bauchi 9.6%, Cross River 12.6%). In Cross River nearly two thirds (62.3%) of the respondents were community health extension workers (CHEWs). Nurses, nurse/midwives, and midwives constituted more than one quarter of respondents, while the rest were Community Health Officers (CHOs) or other cadres. In Bauchi over half (50.5%) of respondents were CHEWs. Nurses, nurse/midwives, and midwives comprised more than one quarter of respondents, while the rest were CHOs or from other cadres.

Nearly two thirds (61.1%) of FLHWs interviewed in Cross River had a diploma as highest level of education, while more than one fifth (23.4%) had a Nursing diploma, combination of Nursing and Midwifery diplomas, or Midwifery diploma alone. Others (2.9%) had higher diplomas or other qualifications (12.6%). In Bauchi nearly half (48.2%) of FLHWs had a diploma as highest level of education, while one quarter (25.2%) had a Nursing diploma, combination of Nursing and Midwifery diplomas, or Midwifery diploma. Some (3.7%) had higher diplomas or other qualifications (22.9%). Most FLHWs (88.2%) interviewed in Cross River graduated from public institutions, while 11.7 percent attended private (including faith-based) institutions. Nearly two thirds of respondents (61.5%) had over five years of practice, while over one third (38.5%) had practiced less than five years. In Bauchi 98.6 percent of FLHWs interviewed graduated from public institutions, while 1.4 percent attended private (including faith-based) institutions. More than three fourths of respondents (78.9%) had over five years' experience, while the remaining fifth (21.1%) had practiced less than five years.

Table 2: Socio-demographic characteristics of health workers

Characteristic	Bauchi (n=218) n (%)	Cross River (n=239) n (%)
Age		
< 30	46 (21.2)	44 (18.4)
30 - 39	89 (40.8)	90 (37.7)
40 - 49	62 (28.4)	75 (31.4)
≥ 50	21 (9.6)	30 (12.6)
Gender		
Male	112 (51.4)	34 (14.2)
Female	106 (48.6)	205 (85.8)
Professional Category		
CHEW	110 (50.5)	149 (62.3)
CHO	10 (4.6)	21 (8.8)
Nurse	28 (12.8)	24 (10.0)
Nurse/Midwife	22 (10.1)	35 (14.6)
Midwife	9 (4.1)	7 (3.0)
Others	39 (17.9)	3 (1.3)
Highest Level of Education		
Diploma	105 (48.2)	146 (61.1)
Nurse	27 (12.4)	22 (9.2)
Nurse and Midwife	19 (8.7)	26 (10.9)
Midwife	9 (4.1)	8 (3.3)
Higher Diploma	8 (3.7)	7 (2.9)
Others	50 (22.9)	30 (12.6)
Training Institution Attended		
Public (government-owned)	215 (98.6)	211 (88.2)
Private or Faith-based	3 (1.4)	28 (11.7)
Work Experience		
< 5 years	46 (21.1)	92 (38.5)
5 - 10 years	88 (40.4)	40 (16.7)
> 10 years	84 (38.5)	107 (44.8)

Health workers' perceptions and understanding of IST and CE

In both states, about 89 percent of health workers were aware of IST and CE for their cadre. When health workers were asked what factors they perceive as influencing selection of FLHWs for IST and CE, the majority in both states did not know (Bauchi 73.4%, Cross River 51.9%). Of the reasons that were provided, seniority (Bauchi 11.9%, Cross River 21.7%) was most frequent, with others including people you know (Bauchi 4.6%, Cross River 2.5%), gender (Bauchi 3.7%, Cross River 8.8%), and LGA of origin (Bauchi 2.3%, Cross River 9.6%). A high proportion of respondents reported that health workers have no say in IST and CE (Bauchi 59.2%, Cross River 82.8%). Workshops were mentioned as a common method of training (Bauchi 83.0%, Cross River 69.0%). More than half of survey participants in both states (Bauchi 53.2%, Cross River 64.0%) stated that IST and CE for health workers are planned and systematic. Similarly, more than half of respondents in both states reported satisfaction and motivation resulted from IST and CE among health workers.

Table 3: Health workers' perceptions and understanding of IST and CE

Characteristic	Bauchi n (%)	Cross River n (%)
Are you aware of IST and CE for your professional group?	n=218	n=239
Yes	194 (89.0)	213 (89.1)
No	24 (11.0)	26 (10.9)
Factors perceived as influencing FLHW selection for IST and CE	n=218	n=239
Seniority	26 (11.9)	52 (21.7)
People you know	10 (4.6)	6 (2.5)
Gender	8 (3.7)	21 (8.8)
LGA of origin	5 (2.3)	23 (9.6)
Tribe	4 (1.8)	3 (1.3)
Marital status	3 (1.4)	6 (2.5)
Religion	2 (0.9)	4 (1.7)
Don't Know	160 (73.4)	124 (51.9)
Do health workers feel they have a say in their IST and CE?	n=218	n=239
Yes	89 (40.8)	41 (17.2)
No	129 (59.2)	198 (82.8)
Common method of training attended by health care workers*	n=218	n=239
Seminar	17 (7.8)	81 (33.9)
On-the-job	35 (16.1)	29 (12.1)
Formal lectures	57 (26.1)	88 (36.8)
Workshop	181 (83.0)	165 (69.0)
Healthcare workers consider IST and CE to be planned and systematic	n=218	n=239
Yes	116 (53.2)	153 (64.0)
No	61 (28.0)	43 (18.0)
Not sure	41 (18.8)	43 (18.0)
Health workers motivated and satisfied with IST and CE programs	n=218	n=239
Yes	118 (54.1)	153 (64.0)
No	100 (45.9)	86 (36.0)

*Multiple responses allowed

Health workers' experience of IST and CE

More than 60 percent of respondents interviewed (Bauchi 76.8%, Cross River 64.4%) reported attending IST or CE after their initial health worker qualification. Among those who had attended IST or CE, more than 60 percent (Bauchi 77.2%, Cross River 61.0%) indicated that they had not sponsored themselves for further study, as part of IST or CE. Many health workers mentioned attending IST or CE between two and four times (Bauchi 55%, Cross River 62.3%), while all respondents in both states stated that their last IST was "relevant" or "very relevant" to their work. Almost all respondents rated the skills and manner of resource persons at their last IST "very high" or "high," and about two thirds of respondents in both states (Bauchi 67.8%, Cross River 68.8%) indicated follow up training(s) since their last IST.

Table 4: Health workers' experience of IST and CE

Characteristic	Bauchi n (%)	Cross River n (%)
Have you ever attended IST or CE since qualification?	n=218	n=239
Yes	149 (76.8)	154 (64.4)
No	45 (23.2)	59 (24.7)
No response	-	26 (10.9)
As a health worker, have you sponsored yourself for further studies?	n=149	n=154
Yes	34 (22.8)	60 (39.0)
No	115 (77.2)	94 (61.0)
Number of times you attended in-service training or continuing education	n=149	n=154
1	53 (35.6)	42 (27.3)
2 - 4	82 (55.0)	96 (62.3)
≥ 5	14 (9.4)	16 (10.4)
Relevance of content of last training to work responsibility	n=149	n=154
Very relevant	94 (63.1)	127 (82.5)
Relevant	55 (36.9)	27 (17.5)
Not relevant	0 (0)	0 (0)
Follow up training after last training?	n=149	n=154
Yes	101 (67.8)	106 (68.8)
No	48 (32.2)	48 (31.2)
Rating of skills and manner of resource persons at last training	n=149	n=154
Very high	31 (20.8)	57 (37.0)
High	118 (79.2)	96 (62.3)
Low	0 (0)	1 (0.7)

Health workers' ranking of topics covered during the last IST attended

Health workers in both states (Bauchi 50%, Cross River 66.2%) ranked HIV/AIDS as the most common topic at their last IST. Other topics ranked in the top five by respondents in both states were family planning (FP) (Bauchi 48.3%, Cross River 50.6%), child health (Bauchi 45.6%, Cross River 47.4%), immunization (Bauchi 37.6%, Cross River 54.5%), and maternal health (Bauchi 36.2%, Cross River 51.9%). Among the lowest ranked by respondents in both states were health information systems (Bauchi 20.8%, Cross River 16.9%) and environmental health (Bauchi 20.8%, Cross River 14.3%).

Table 5: Health workers' ranking of topics covered during the last IST attended

Bauchi			Cross River		
Rank	Topics covered	n=149 n (%)	Rank	Topics covered	n=154 n (%)
1 st	HIV/AIDS	75 (50.3)	1 st	HIV/AIDS	102 (66.2)
2 nd	Family planning	72 (48.3)	2 nd	Immunization	84 (54.5)
3 rd	Child health	68 (45.6)	3 rd	Maternal health	80 (51.9)
4 th	Immunization	56 (37.6)	4 th	Family planning	78 (50.6)
5 th	Maternal health	54 (36.2)	5 th	Child health	73 (47.4)
6 th	Infectious diseases	45 (30.2)	6 th	Infectious diseases	51 (33.1)
7 th	Reproductive health	43 (28.9)	7 th	Nutrition	42 (27.3)
8 th	Nutrition	39 (26.2)	8 th	Communication skills	40 (26.0)
9 th	Communication skills	39 (26.2)	9 th	Disease surveillance	32 (20.8)
10 th	Disease surveillance	39 (26.2)	10 th	Health information systems	26 (16.9)
11 th	STI management	38 (25.5)	11 th	Health promotion	24 (15.6)
12 th	Monitoring and evaluation	35 (23.5)	12 th	Monitoring and evaluation	23 (14.9)
13 th	Health information systems	31 (20.8)	13 th	Reproductive health	22 (14.3)
14 th	Environmental health	31 (20.8)	14 th	Environmental health	22 (14.3)
15 th	Health promotion	-	15 th	STI management	21 (13.6)

Health workers' gender perspectives about IST and CE

About one third (33.9%) of respondents in Cross River consider health worker IST and CE selection to be gender-blind, while more than half (55.5%) of respondents in Bauchi consider it gender-blind. More than 40 percent of respondents in both states (Bauchi 41.8%, Cross River 59.0%) were unaware of efforts to address gender discrimination in FLHWS' IST and CE. When asked how female health workers can feel discriminated

against, due to gender, over 70 percent of respondents in both states (Bauchi 70.8%, Cross River 82.9%) said there was no basis for female workers to feel discrimination in relation to IST and CE. Some respondents in both states indicated that female health workers may feel discrimination due to gender issues such as maternity leave (Bauchi 14.1%, Cross River 9.3%) or childbirth (Bauchi 8.5%, Cross River 4.4%), however.

Table 6: Health workers' gender perspectives of IST and CE

Characteristic	Bauchi n (%)	Cross River n (%)
Do you consider health worker selection for IST and CE gender-blind?	n=218	n=239
Yes	120 (55.0)	81 (33.9)
No	48 (22.0)	151 (63.2)
Don't know	50 (23.0)	7 (2.9)
Are you aware of efforts to address IST and CE gender discrimination?	n=218	n=239
Yes	38 (17.4)	43 (18.0)
No	91 (41.8)	141 (59.0)
Don't Know	89 (40.8)	55 (23.0)
On what bases do female health workers feel discriminated against for IST/ CE?		
Maternity leave	15 (14.1)	19 (9.3)
Childbirth	9 (8.5)	9 (4.4)
Pregnancy	0 (0)	7 (3.4)
Family responsibility	7 (6.6)	0 (0)
Never felt any discrimination	75 (70.8)	170 (82.9)

Providers and funders for IST and CE

Providers and funders of IST and CE for FLHWs in both Bauchi and Cross River can be broadly categorized as training institutions (e.g. schools of Nursing and Midwifery, colleges of health technology, federal and state universities), professional associations (National Association of Nigerian Nurses and Midwives, National Association of Community Health Practitioners of Nigeria), ministries, departments and agencies (SPHCDA, State Agency for the Control for AIDS), non-governmental organizations (NGOs—e.g. FHI360, Population Council, Society for Family Health, Pathfinder International), projects (Health Finance and Governance project, Evidence for Action project, LEAD project), as well as multilateral organizations (WHO). Some of these IST and CE providers and funders are international (FHI360, Population Council, WHO), others are national (National Association of Nigerian Nurses and Midwives, federal universities such as Abubakar Tafawa Balewa University Bauchi), and some are state level (SPHCDA, State Agency for the Control for AIDS).

Table 7: Providers and funders of IST and CE

Training institutions (Bauchi State)	Training institutions (Cross River State)
Abubakar Tafawa Balewa University	School of Nursing, Calabar
Bauchi state University, Gadau Campus	School of Midwifery, Ogoja
Bauchi state college of nursing and midwifery	School of Nursing Itigidi
College of Education, Bauchi, University of Maiduguri affiliate	College of Health Technology, Calabar
College of Health Technology, Ningi	School of Post-Basic Midwifery, Calabar
Garu Islamic College of Health Technology	
MDAs	MDAs
SPHCDA	SPHCDA
Bauchi State Agency for the Control of AIDS	Cross River SACA
Professional Registration Councils and Boards	Epidemiology Unit (CDC), MoH, Calabar
Nursing and Midwifery Council of Nigeria	IMCI department
Community Health Practitioners Registration Board	NPI Office
Professional Associations	Professional Associations
National Association of Nigerian Nurses and Midwives	National Association of Nigerian Nurses and Midwives
National Association of Community Health Practitioners, Bauchi chapter	National Association of Community Health Practitioners of Nigeria, Cross River branch
NGOs/Projects	NGOs/Projects
FHI 360	FHI360
Evidence for Action	Clinton Health Access Initiative
FOMWAN, Bauchi chapter	Pathfinder International

Plan International BORN (Bauchi Opportunity for Responsive Newborn and Maternal Health) project	Evidence for Action
RTI LEAD project	Health Finance and Governance project
Society for Family Health	Society for Family Health
Population Council	Population Council
Multilateral organizations	Multilateral Organizations
WHO	WHO

Qualitative Findings

Perceptions of participants on IST and CE

Participants from both Bauchi and Cross River demonstrated fair knowledge of IST and CE for FLHWs. The need for sustaining IST and CE by all stakeholders in the health sector was recommended. Participants believe that regularly updating health workers' knowledge and skills is vital because of emerging innovations and a plethora of disease conditions, in addition to the fact the health sector is important for the country's development. They argue that it is paramount for health workers to be well prepared with adequate capacities to efficiently and effectively treat patients, provide services, and save lives whenever need arises.

Health care worker definitions and perceptions of IST and CE differ. Participants who had attended IST and CE stated that IST and CE increased their productivities and helped in updating their knowledge bases of new ideas, innovations, and techniques for their duties at various health facilities. It also facilitates license renewal, thus creating opportunities for promotions or salary increases in chosen fields of practice.

"Continuing education is the process of updating one's learning in order to fit into today's demands..."

Health worker, FGD, Cross River

"Well...in my layman's understanding, in-service training is a training that you give staff during active service, to further their education so as to contribute more to the job."

Unit head, FGD, Bauchi

"In-service training is when health workers continue with education, to update knowledge and to bring about effectiveness in the service..."

Health Manager, FGD, Cross River

Coordination of training

Study respondents indicated that the government and its ministries, departments, and agencies work with other IST providers such as regulatory bodies to coordinate training for key FLHWs. The need for state governments and IST providers to collaborate with development partners and international NGOs that provide IST for FLHWs was discussed. Most respondents stressed the need for such collaboration so if development partners leave or their projects end, governments and local IST providers can continue quality trainings and capacity-building for health workers. To facilitate better training coordination, respondents suggested creating effective policies to improve coordination among government ministries, departments, and agencies.

Continuing professional development

The suggestion that continuing professional development should be mandatory for all health workers and linked to periodic renewals of professional practice licenses was approved by interview participants, who believed it is feasible in Nigeria's health sector. The costs of license renewals, which for some health workers are a challenge, and the fact that some workers, especially in rural areas, practice without current licenses due to poor monitoring by regulatory bodies, were reported by respondents. Participants from Cross River reported that there are measures for monitoring to ensure health workers without licensures are not practicing.

Importance of IST and CE to health workers

Most focus group discussants emphasized the importance of IST and CE to their work, which improve and update their knowledge. Knowledge from trainings helps improve quality of service and ensures appropriate execution of duties. Some participants stated that IST and CE help determine promotions.

"It is very important to go for in-service training because in terms of service effectiveness and doing it as appropriate. When there is capacity building in terms of training or in-service, it will make you to execute, discharge your duties appropriately...in-service training helps with the issue of promotion and other administrative issues."

Health worker, FGD, Bauchi

Coordination mechanisms between IST and CE program providers and key stakeholders

Participants believe their state governments should be part of a coordination mechanism for IST and CE providers and key stakeholders. Interviewees pointed out that this coordination mechanism is vital. Suggestions for sustaining coordination mechanisms include:

- Creating a functional M&E unit and periodic review of coordination mechanism plans
- Creating training policies with strong political will to implement those policies
- Awareness of the need for coordination mechanisms, while maintaining existing state, national, and regional collaborations
- Increasing funds and prompt release of funds by governments so qualified health workers can benefit from trainings, and
- Regular exchange of information between LGA, state, regional, and national health coordinating units.

"The national will plan then step down to the state, then the state will collaborate with the local government for the implementation at the LGA level."

Policymaker, KII, Bauchi

"The collaboration of state, national, and regional should be maintained."

Health Manager, FGD, Bauchi

Selection process for trainees

Gender equality in IST selection was reported by Cross River participants, while those from Bauchi reported that its government often selects people for training based upon gender considerations such as, for instance, preference for females for midwifery courses. It was reported that selection is also based upon prevalent diseases in communities. Other reported key selection criteria include IST and CE training institutions, course accreditation, staff eligibility, government training policy emphasising performance and skills development, and number of years a health worker has been in service, among others. Participants also mentioned challenges: Foremost was favoritism, then not following due process, not selecting eligible or qualified people for training, and delays in staff releases for training after obtaining admission for IST or CE from their providers.

"You go there on your own since you feel you want to update yourself, to be relevant in the field tomorrow."

Health worker, FGD, Cross River

"If we visit a health facility and discover a health worker performing a particular skill, we will say, this one is trying and there is need for him to be trained. We identify him and forward his name to the appropriate authority."

Unit head, FGD, Bauchi

"Yes, they have a system...it could depend on the how many years you are in the service, there are some number of years that when you reach, they will plan training. So that they will even inform the people who are scheduled for training..."

Health Manager, FGD, Bauchi

"Participants are selected based on the individual interest...and probably based on your qualification...and then probably based on number of years you have put into the system..."

Health worker, FGD, Cross River

Tracking mechanism for IST programs and trainers

Participants stated that IST programs and trainees should be tracked through national and regional mechanisms. It was made clear that without working databases, planning will be difficult.

“We try as much as possible to have all the data...it is very feasible, and we have to improve it often...”
Policymaker, KII, Bauchi

“Without a database, you can't plan.”
Unit head, FGD, Cross River

“Set up a database, and regularly update the database.”
Policymaker, KII, Cross River

“Train personnel first on data collection...and create a database within the department so at least there will be a database in the Ministry.”
Unit head, FGD, Bauchi

Participants mentioned that it is feasible to start tracking mechanisms for IST programs and trainers, and made recommendations for improving tracking mechanisms for IST programs, trainees, and trainers:

- Governments should build an effective database, when lacking, and regularly update existing ones
- Governments should increase funding for computer procurement and other information and communication technology (ICT) monitoring devices
- Governments should devise policies mandating that all ministries, departments, and agencies operate functional databases
- Governments should build the capacities of database managers through appropriate ICT training, and
- Date captured in LGAs and states should be harmonized.

Design and delivery of services

Alignment with national and regional training plans

Participants had divergent views about whether training programs align with national and regional training plans, and whether these are designed to address and assess training needs. Some respondents stated that the ideal situation is for national alignment, while others believe training programs should be regional- and state-specific because of differing contexts. To improve the current situation, respondents suggested that:

- Each state should plan and build its own model of training specific to the state
- Each state should implement a mapping and training needs assessment to identify training gaps and assess congruencies and differences with the national template
- Governments should increase HRH budgets—and release the funds
- Policymakers should be engaged to adequately appreciate both the need and added value of health worker IST and CE
- Governments should track all training through information system mechanisms
- Governments should scale up monitoring and evaluation of the alignment exercise, and
- Better communication and proper coordination among state, regional, and federal levels.

“I want to look at regional like a zone...there are some specific things that are specific to the regions and states, so training plans should be state-specific.”
Policymaker, KII, Cross River

“It is for the state to plan its own model of training...specific to the state...”
Health Manager, FGD, Bauchi

“Each state, having the national template by the side should now look at it whether to adopt all of it or to add or subtract to what is applicable to them.”
Unit head, FGD, Bauchi

Design to assess and address training needs

Participants were asked how current IST addresses their states' training needs. There was consensus that ISTs are relevant and are *designed* to address knowledge and skills gaps in their states; some respondents provided suggestions on how to achieve this. One key suggestion was for proper needs assessments by IST providers prior to beginning any training program. It was also suggested that training providers should design specified training plans and work according to those.

"So, first of all we should have a training plan...based on the training plan, the HRH unit will prioritize the training needs of the Ministry."
Policymaker, KII, Bauchi

Needs of the organization and individuals

Governments identify areas in which they want organizations and individuals trained based upon pressing health sector gaps, although some participants indicated that, in some cases, individual interests still influence selection of organizational and individual study areas, suggesting that IST and CE for FLHWs in states are demand-driven (i.e. needs-based) as well as being based upon individual interests.

"The hospital you are working with, have management...the management will consider the needs of the hospital, if there they are deficient in an area of specialization then the hospital may send you or they can say let's go for something else, not what you are in need of."
Health Manager, FGD, Bauchi

"Most of the people...going for in-service training are going along the lines of what they studied..."
Health Manager, FGD, Cross River

"Most times it is needs driven...maybe there is a[n] incidence of maternal or neonatal deaths, then the need may now rise...to train health workers on that aspect."
Health worker, FGD, Cross River

Pre-service to IST continuum

Collaboration between in-service program providers and pre-school training institutions

Participants affirmed the need for significant collaboration among IST providers and pre-school training institutions in their states. Participants reported collaborations, to a reasonable extent, between IST providers and pre-service training institutions in their states. New policies are mitigating factors that prevent their effective collaborations. Participants stated that NGOs from other states now liaise with pre-service institutions for training planning and implementation. Key issues in these collaborative efforts mentioned by participants include need of full involvement of all key stakeholders including private training institutions, need for IST providers' provision of training guidelines and protocols to state pre-service training institutions, need for fully equipping available health training institutions to meet accreditation requirements, and building more training institutions, among others.

"Well, for in-service training as I told you, we in the health sector, we do collaborate with pre-service training institutions, but the missing link is that, the decision making for in-service training is not entirely with us. But...we do collaborate with the pre-service training institutions..."
Unit head, FGD, Bauchi

"There are some private institutions in Bauchi state, they should be involved too, once they are involved fully, we will reach the target."
Health Manager, FGD, Bauchi

Strengthening training institutions and systems

Formal accreditation of training institutions, IST curricula and materials

Respondents mentioned the need for the formal accreditation of all IST curricula and materials by relevant regulatory bodies. Not all courses and health training institutions are presently accredited, and viable policies and guidelines are being implemented to ensure their accreditation. Respondents believe that no institution should be allowed to operate without formal accreditation. Accreditation challenges reported by respondents included lack of infrastructure, staff shortages, and delays and costs of accreditation renewals.

“For any school that wants to establish, they have to go through Nursing and Midwifery Council of Nigeria; they are the body that will give you the licenses to practice as a training institution.”

Unit head, FGD, Bauchi

Respondents also recommended further measures to mitigate challenges and ensure strict adherence by health training institutions to regulating agencies’ policies and guidelines, including:

- Training materials and curricula should be checked, approved, and regularly updated by regulatory authorities, partnering with all key stakeholders
- Constant monitoring and supervision of training institutions by relevant regulatory bodies and authorities
- Regular monitoring and inspection of health training institutions
- Scheduled reviews of renewals of accreditation for health training institutions, and
- Recording, and routine maintenance of those records, by professional bodies in the health of all registered members for follow up for license renewals.

Formal authorization of IST program providers

Respondents agreed that formal authorization of all IST program providers within states is necessary, for effective health worker IST and maintenance of adequate standards by all providers.

Policy for health workers on IST and CE

Respondents revealed varied recognition of IST and CE policies, in both states, with some reporting policy stipulations for certain education conditions, others stating that there was a policy, but they had not seen it, while others reported being unaware of any such policy.

“I am aware about the policy, but the problem is that we don't have it at hand...it's not available, it's not available to everybody...there is in the office of Head of Service, we have civil service rules and all these kinds of rules and regulations are in the civil service rule book. The problem is that we have shortage of circulation of this document...”

Policymaker, KII, Bauchi

“There is a policy, I think there is a policy...I have not had the opportunity of seeing it.”

Unit head, FGD, Cross River

“I'm sorry, I don't know if there is a policy.”

Health worker, FGD, Bauchi

Stakeholder engagement

Respondents reported that measures for engaging all health sector stakeholders in health worker IST are being put in place. Frequent meetings with stakeholders have helped identify both gaps and needs among health workers. Respondents in Cross River stated that the state government should continually strengthen (in terms of infrastructure, building knowledge and skills, etc.) health training institution collaborations with NGOs, as well as promoting cooperation between institutions, NGOs, and other stakeholders to promote more effective health worker IST.

“...advocacy to stakeholders on the importance of these in-service training...government, development partners, et cetera...”

Health worker, FGD, Cross River

“The state government should strengthen their institutions that are collaborating with those NGOs, by strengthening I am referring to a lot of things - in terms of infrastructures, in terms building knowledge and skills, in terms of learning to work as a team...”

Policymaker, KII, Cross River

Strengthening local infrastructures and trainers

The need for IST program providers to use local infrastructure and trainers for trainings was widely recommended by participants, for strengthening local trainer capacities, identifying local training institution needs, and informing decision-making, at numerous levels. Several development partners and NGOs reportedly have used local institutions for their trainings. Respondents offered suggestions for encouraging

NGOs' and development partners' utilization of local training institutions and trainers, including adequate government funding, conducive and enabling environments, strong government commitments to sustaining NGO and partner efforts, addressing infrastructure and ensuring equipment availability, adequate instructor training, and reviews of school curricula.

"... [development partners and NGOs] actually strengthen us...help us...for this building we built it up, we couldn't finish it. They supported and finished the roofing, that is they supported the upper part, but now we are using it...they also provided the generator..."
Health Manager, FGD, Cross River

Support for training of trainers

Training of trainers was seen as realistic, and encouraged, by study participants, and reported as ongoing in both states, although mostly in Bauchi, with competent trainers trained frequently and sent to train others according to need. Measures were being implemented to ensure appropriate individuals were chosen as trainers for effective knowledge transfer.

"Trainings have been going for the training of trainers...pick a program officer, train him to come back and train other people..."
Health Manager, FGD, Bauchi

Support for training and learning

Development partners and NGOs, professional bodies and health training institutions, governments and parastatals, along with self-sponsorship, were all mentioned by health workers as IST and CE providers or funders.

Professional bodies

Participants stated that professional bodies actively support health care IST and CE in Bauchi and Cross River, sponsoring some key members of their various associations when need arises.

"As an association, we scout for institutions or the related courses for our members...we go into institutions to inquire about the kind of courses they carry out or that are available for our members, we buy forms from the organizations for our members and we follow up the admission processes..."
Stakeholder, KII, Bauchi

"Associations like the Nursing and Midwifery Council...provide continuing education for health workers within the state."
Policymaker, KII, Cross River

Government and parastatals

State and local governments were mentioned as supporters of learning in the health sector. This support for IST by government and parastatals helps address key issues affecting states' health sectors. Some participants reported that government CE sponsorship has diminished, arguing stating that governments now hardly sponsor health workers for IST and CE, and when they do, incentives and other facilitating factors are not provided. Key federal and state ministries, departments, and agencies are supportive of health sector learning and IST.

"Sometimes it can be organized by the government—health workers are picked to go [for in-service training] and the government will do the funding..."
Health Manager, FGD, Cross River

"The government provides the funding for in-service training and you are given the permission to go...on approval the state will take care of your expenses."
Health Manager, FGD, Bauchi

"...lack of incentives...in those days people were forced to go for in-service training, whether you like it or not. When you come back you are paid books allowance, course allowance—but now all those things are not there."
Health worker, FGD, Cross River

"...State Ministry of Health, the Hospital Management Board, State Primary Health Care Development Agency...they are the ones providing funding for in-service training..."
Policymaker, KII, Bauchi

Health institutions and facilities

Participants said that institutions and facilities are supportive of IST and learning, with institutions in some states providing IST for FLHWs, in coordination with development partners and NGOs.

"In the hospitals, there is usually a unit for continuing education. They have the mandate to organize, maybe for a day or two days, refresher training programs for issues that are necessary or threatening."

Policymaker, KII, Cross River

"Like in this state, the provider of in-service training for health workers are institutions like ours— College of Nursing and Midwifery..."

Unit head, FGD, Bauchi

NGOs

NGOs were reported as key factors in IST support and health sector education in both Bauchi and Cross River. ISTs are organized by NGOs on a regular basis, and during disease outbreaks.

"There are many opportunities and some of these opportunities are provided by the NGOs...they are doing a lot of capacity building and trainings."

Unit head, FGD, Cross River

Development partners

Participants mentioned that development partners actively sponsor IST for health workers. In some local communities, politicians and other well-meaning partners support health worker training and learning. Communities sometimes sponsor indigenes and build their health workers' capacities through development unions and community associations.

"Most of such workshops and seminars and some short courses are at times supported by some development partners working in the state."

Policymaker, KII, Bauchi

"In some communities, if they have prominent people in the community and they know that children in that community are educated, they sponsor them..."

Health worker, FGD, Bauchi

Self-sponsorship

Participants mentioned sponsoring themselves for IST and CE at times, as the government does not regularly sponsor health workers: They take advantage of any opportunity to further their studies rather than waiting for the government. Self-sponsorship was reported as largely practicable. Those with intentions for any IST or CE must first seek government approval and can only proceed after receipt of a letter of release. Some complained about delayed release letters. If appropriate approval is obtained, the government continues salary payments while health workers engage in IST or CE studies.

"Right now, they are not doing it, we do it ourselves. They only give consent for you to go to school, with your salary on."

Policymaker, KII, Cross River

"The person that needs to acquire knowledge can take the responsibility upon himself, in order to go and acquire the knowledge."

Health Manager, FGD, Bauchi

Evaluation and Improvement of training

Addressing performance gaps

Organizations may have performance gaps, with some organizations supporting their staff with IST and CE to address them. When respondents were asked if they believe gaps in care are addressed by IST and CE, they responded that knowledge acquired in IST and CE does build workers' capacities and enables them to address existing problems. To properly address gaps, discussants suggested that governments should encourage IST for staff, by releasing them in time, in addition to sponsoring them when possible. Governments should conduct training needs assessments to determine the domains that will address gaps.

A major challenge hampering efforts to address gaps is that most training beneficiaries, especially in rural communities, often move or re-locate to urban areas, perpetuating service gaps.

“In-service training helps address the performance gap in the state, because as you go in you acquire more knowledge and as you come back to your field you will be able to tackle the problems you were not able to tackle before because of the knowledge you have acquired.”

Policy maker, KII, Cross River

“Yes [in-service training helps address performance gaps], but the problem about performance gaps are that most of them that are trained concentrate in urban areas as against rural settlements.”

Health Manager, FGD, Bauchi

“It is addressing gaps, because it increases capacity, skills, and the performance of staff...they go and further...education, acquire additional skills that increase the capacity...”

Health Manager, FGD, Bauchi

Relevance and efficiency of training

Participants believe all IST providers should periodically evaluate the effectiveness of their training programs, because in addition to its importance for better can and improved outcomes, it makes trainings more relevant for health workers and the health sector. Changes are felt in the system when health workers return from trainings. To ensure periodic IST evaluation is sustained, participants recommended that governments strengthen trainer quality, through new training performance evaluation units at SPHCDA, or strengthened extant units, especially those with health worker training responsibilities. IST providers should always implement post-training evaluations of staff as well as trainees. Funds for training should be made available and released without delays. Discussants also mentioned the need for good “political will” and support for training by policymakers, which is key to facilitating more effective implementation of policies.

“Yeah...we can achieve that by making sure that all trainers are mandated to come and do post evaluation for each of the category of staff trained...”

Health Manager, FGD, Bauchi

“It is very effective...because you see it in us, you see it in the community, you see it in our environment. For instance, when you go back to our facility, you see that the level [of performance] has changed...”

Health worker, FGD, Cross River

Recommendations for the improvement and sustainability of training

Discussants, primarily in FGDs, made recommendations for IST in their states. They stated that governments should collaborate with community leaders, in addition to sensitizing men whose wives are health workers, to address issues that hinder women from furthering their educations. Governments should supply modern equipment so workers can effectively apply their knowledge and skills acquired in IST and CE to improve health outcomes. To address staff shortages, discussants stated that governments should ensure knowledge acquired through training, as well as experience, are imparted to others in health facilities through “step down” trainings. Government should provide funding for IST at facilities and offer incentives such as promotions for those who participate in trainings, especially when newly acquired knowledge, skills, and expertise significantly improve productivity and health outcomes.

“One thing that I think will facilitate in-service training is if they create enabling environment for health workers to further [develop] themselves academically...enabling environment and incentives...”

Health Manager, FGD, Cross River

“Training should not be limited to only urban [health workers], it should also focus on the rural areas.”

Health worker, FGD, Bauchi

“As said, it is true that our husbands don't like us to go for training. So, they should create awareness for the husbands so that they allow us to go for trainings...”

Health worker, FGD, Bauchi

“In addition, the government should bring relevant courses to our nearby universities. For instance, this university we have here...We don't have relevant courses for health workers in Abubakar Tafawa Balewa University Bauchi.”

Health Manager, FGD, Bauchi

“...implementation of the policies that are on ground already. We have good policies...”

Unit head, FGD, Cross River

Challenges of IST and CE

Discussants mentioned many factors in their states that constitute challenges for IST and CE that affect the efficaciousness of IST in their states.

Bureaucracy and delayed implementation

Discussants reported both delays in application processing in addition to releases of staff for IST.

“Sometimes when you get the admission, the release from the government takes time before they will release you to go for your in-service training.”

Health worker, FGD, Bauchi

“What affects it here is that although...staff applies, sometimes it's difficult for the government to accept...”

Policymaker, KII, Cross River

“...the lack of fund on the part of the government, as am talking now, the government came out with a budget, to access that budget for implementation of these activities is a problem.”

Policymaker, KII, Cross River

Poor maintenance culture and lack of facilities and equipment

A culture of poor maintenance was mentioned by discussants, with equipment neglect at health facilities due to lack of proper monitoring and maintenance, which includes lack of equipment.

“I will suggest poor maintenance culture in some of our facilities, the moment they buy all the equipment, nobody comes back to check whether things are going right...”

Health worker, FGD, Cross River

“[Another challenge is] lack of equipment that will enable...the program in that particular facility...”

Health Manager, FGD, Cross River

“Normally when you go for in-service training, sometimes you specialize on a particular field but sometimes the government is not interested to motivate you and provide the necessary equipment and facilities that will help you practice what you have learnt.”

Health worker, FGD, Bauchi

“The Nursing and Midwifery Council of Nigeria has criteria for the number of candidates that can be enrolled and trained in a school every year, and presently we have two schools of Nursing, but only one is functioning.”

Policymaker, KII, Bauchi

Staff competency

Participants reported lack of staff competency as a challenge for effective IST, even for those with recent IST and expectations of improved capacities.

“Yes, we still have some nurses who are on the field, they don't really know what they are supposed to do, but this is somebody who has really gone for in-service training and come back...”

Stakeholder, KII, Cross River

“You see, capacity is a big challenge. You employ somebody who cannot write...and then the person keeps dodging, even when you want to help...he dodges.”

Stakeholder, KII, Bauchi

Corruption

Participants also mentioned corrupt practices as a challenge to achieving training objectives, particularly due to diversions of funds intended for health worker training.

“You know in Nigeria, there is corruption that's the truth! Maybe the money was put there, but instead of the money to be used, it will not be used, somebody will just pocket the money.”

Health worker, FGD, Bauchi

“Even if staff applies, and money is released, it's not that staff that collects the money, somebody else takes the money.”

Stakeholder, KII, Cross River

Cultural and religious backgrounds

Participants, especially those interviewed in Bauchi, stated that cultural norms and religious beliefs can be challenges, especially for female workers' participation in IST and CE programs.

"...because you are a woman, you are not supposed to go too far and leave your children and leave your husband..."

Health worker, FGD, Bauchi

"...for instance, I wanted to go for further education, but the problem was my husband refused me..."

Health worker, FGD, Bauchi

Lack of supervision and training of inappropriate cadres

According to respondents, lack of training supervision by the government, especially for monitoring training programs and outcomes, is a challenge for IST programs. Discussants also mentioned issues with choosing inappropriate cadres for training, possibly due to bias, political interference, or lack of proper government oversight.

"...the other side of it is monitoring, what happens after the training..."

Policymaker, KII, Cross River

"There is no high level LGA supervision to go to facility and see what the health workers do. By high level, I mean the Chairman...they don't go to supervise the clinic and see the situation...there are some hospitals that there is no mattress, no bed sheet no even kits and so on and so forth. That can discourage the health workers from rendering their services."

Health Manager, FGD, Bauchi

"If you look at it, the state is aware of lack of health workers quite alright, particularly midwives but I don't know what is happening, is it because of the cost of the training or something like that? They prefer to train lesser cadres than the nurses and midwives, [like community health workers]."

Health Manager, FGD, Bauchi

Political interference

Participants mentioned that political interference can affect IST and CE effectiveness. In some instances, bonding arrangements, whereby a government sponsors health worker training with stipulation of return to a local area after training, are not honoured when individuals have connections to people with influence.

"Honestly there are a lot of people that are a bit influential, if you try to put pressure or put eye on them, to ensure that they comply with the bonding, you may suffer...because of the connection they have...most of those people are not coming back to serve the state."

Stakeholder, KII, Bauchi

"One of the things that stop the effectiveness of in-service training and continuing education is when the government brings out policies that will discourage people from going for in-service training..."

Health worker, FGD, Cross River

Training events leaving facilities understaffed

Staff shortages at health facilities were referenced as a challenge preventing health workers from attending trainings, to avoid leaving their facilities under-staffed.

"...maybe there are few health workers in the facility, when you move one or two persons for any training program...when cases come, nobody to handle them..."

Unit head, FGD, Cross River

"Another challenge is lack of manpower in the facility, sometimes, even if you are interested in furthering your education, and it happens that your hospital or your facility lacks manpower, then you may be hindered to go...there is shortage of manpower."

Health worker, FGD, Bauchi

Staff attitudes

The attitudes of trained staff can be a challenge in some instances. Participants mentioned negative attitudes of some health workers that do not encourage productive outcomes. Some respondents mentioned "nonchalant" attitudes of some health workers, even when offered IST opportunities.

“We have some instances of people that have nonchalant attitude...will secure admission...released from work for in-service training, but he will not go to study...”

Health Manager, FGD, Bauchi

“...for example, you've gone to school and you are back, but instead of you to do your work, you just neglect it because of some reasons...”

Health Manager, FGD, Cross River

Staff motivation and welfare

Study participants made it clear that lack of regular salary payments, incentives, as well as promotion, are challenges for IST and CE. With few opportunities for government sponsorship, health workers are unable to participate in training, especially CE, which requires financial support.

“...lack of regular payment of salaries...like for some period now, the community health workers have been passing through stress...without money how can you go, they don't pay.”

Health worker, FGD, Cross River

Discussion

This assessment demonstrates high levels of awareness about IST and CE among its participants, with about 90 percent of respondents in both states indicating awareness of IST and CE for their professional groups. Study respondents reiterated the importance of IST and CE for improving health worker capacities for more effective health care services, as reported by other studies.^{10,11} The key findings of this assessment's qualitative component employ seven key thematic areas: respondents' perceptions of IST and CE, support for training and learning, design and delivery, coordination of training, continuum from pre-service to IST, training institutions and systems strengthening, and evaluation and improvement.

A huge proportion of respondents reported that health workers are unable to determine their own IST and CE, and suggested that factors such as seniority, personal relationships, LGA of origin and gender play key roles in health worker IST and CE selection. Opinions of IST and CE varied among health workers and other key stakeholders in Bauchi and Cross River. Views diverge on training implementation, health worker capacity-building methodologies, and when trainings occur. Generally, most health workers and stakeholders interviewed believe that ISTs are forms of training while in service, or after completing pre-service at health training institutions, to build capacities, improve work performance, and create opportunities for career progression including promotions and salary increases.¹²

Respondents indicated that governments and parastatals are generally financially responsible for supporting health worker IST and CE. Frustrations about government support were raised, for example older health workers especially reflected that the government formerly paid trainees' bills and allowances, but now the situation is different. Other respondents spoke of NGO and development partners' support, but these forms of support require sustainability plans, as has been discussed elsewhere.¹³ A number of health workers discussed the current reality of self-sponsorship, yet still focused on the potential key benefits of IST and incentives such as promotions, better pay, and renewals of practice licenses. Most, however, believe there is not enough support for health workers' IST and CE.

While IST design and delivery are vital, most stakeholders and health workers argue they are mainly demand-driven. Trainings are based on identified needs of individuals, organizations, particular governments, or communities, and those needs are synthesized, typically through needs assessments, aligned to address current health worker training needs in a state.¹⁴ Topics most commonly covered during trainings in both states were HIV/AIDS, FP, child health, immunization, and maternal health.

Health workers mentioned the importance of collaboration between government training institutions, development partners, and NGOs, so that local IST providers can assure continuance of quality trainings. The participant selection process is another area of significance. In Cross River, participants said there was no gender bias in training selection, but Bauchi appears different, according to respondents. In Bauchi gender issues are apparently considered when selecting trainees, because of existing cultural norms and religious beliefs. Other factors mentioned in both states that are considered during selection include disease prevalence in a given community, staff eligibility, and government training policies.

Study participants believe training coordination can be more effective through improved IST tracking mechanisms, such as comprehensive and functional regional and national databases of worker training. Respondents stressed the need to strengthen existing training institutions and systems and spoke of the need for formal accreditation of all health training institutions, as well as IST curricula, by regulatory bodies. They believe all health training institutions (public and private) should operate only with formal accreditation from regulating bodies, and that all IST providers should obtain appropriate authorizations for any trainings, and these should be regularly monitored to guarantee the highest standards for health worker training.

It is important to strengthen local infrastructure and trainers for health workers' IST. Governments and their parastatals, NGOs, development partners, and individuals including community members were mentioned as providers and funders of health worker IST. Participants suggested that IST program providers should utilize local infrastructures and trainers for organizing trainings in any particular state. They also mentioned training trainers to strengthen local trainers. Evaluation of training is also considered important, for their improvement, as training outcomes are only realized through proper evaluation and close supervision, whereby corrections are made, performance gaps are filled, and challenges are addressed.

Although study respondents believe trainings play a significant role in addressing performance gaps, they acknowledged continuing challenges. Challenges mentioned include delays in both application processes and staff releases for assigned training, poor maintenance cultures within government organizations, staff competency, corruption including diversion of training funds for other uses, in addition to personal/family issues and responsibilities that can preclude health workers' training. Additional challenges include funding gaps preventing staff sponsorships, misplaced government priorities, inadequate or insufficient training facilities, as well as staff attitudes. Participants recommended that all training providers should periodically evaluate the effectiveness of their training programs, which is supported in literature on training practices.¹⁵

Health workers consider key priorities to be:

- Increased funding by governments for IST and CE
- Policies for equitable selection of health care worker IST and CE
- Mechanisms to ensure fair selection processes
- Accurate databases of trained health staff
- Regular supervision and monitoring to enhance performance
- Adequate and suitable equipment in health facilities to support application of newly acquired knowledge, skills, and expertise, from IST and CE
- Appropriate considerations of gender when planning trainings, and
- Mandating IST and CE for licensing renewals.

Many key informants also supported IST or CE as pre-requisites for licencing renewals, in addition to aligning regional and national plans for health worker IST and strengthening collaborations between IST providers and pre-service training institutions, in addition to periodic evaluations of health worker IST and CE. Although most key informants stated that different states are at different stages for implementation of IST and CE plans and best practices, they generally believe they are feasible.

Policy Recommendations and Conclusion

Recommendations for policy and practice

Based on the results and findings derived from this study, recommendations for action in both states include:

- Increased collaboration among IST program implementing partners
- Besides training funding, funds should be specifically allocated for follow up with health workers after training to support knowledge transfer and application
- Periodic evaluation of trainings should determine their effectiveness, for necessary and appropriate adjustments
- Government funding for IST programs should be guaranteed as well as safeguarded, and responsibly utilized for set objectives of health worker building-capacity and top-quality health care services
- A tracking mechanism should be designed to support improved monitoring, planning, coordination, and reporting of IST programs to program providers,
- Each state should have a robust IST and CE policy with a costed work plan and adequate budget to match the plan, and
- Sustainability plans to ensure financial resources and human resources are available, to support IST programs after development partner funding expires, should be considered top priority.

Conclusion

This assessment provides evidence of the current statuses of IST and CE for health workers in Bauchi and Cross River and proposes strategies for their improvement. Improving the means and mechanisms for FLHW IST and CE will ultimately improve MNCH service delivery in both states.

Study Limitations

While this study makes significant contributions to the evidence base for key FLHWs' IST and CE, there were some limitations. There is a possibility of response bias and that self-reporting by study participants could have led to over- or under-reporting. This possibility was addressed with the use of multiple data collection approaches to facilitate triangulation of findings, with adequate training for interviewers, along with assurances to study respondents that no identifiers would be utilized during documentation.

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