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E2A EVIDENCE TO ACTION for Strengthened Reproductive Health

The Training Resource Package for Family Planning: Strengthening Family Planning Training in Pre-Service Education for Nurses and Midwives in Tanzania and Uganda

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Contents

About E2A

The Evidence to Action Project (E2A) is USAID's global flagship for strengthening family planning and reproductive health service delivery. The project aims to address the reproductive healthcare needs of girls, women, and underserved communities around the world by increasing support, building evidence, and leading the scale-up of best practices that improve family planning services. A Cooperative Agreement awarded in September 2011, E2A is led by Pathfinder International in partnership with ExpandNet, Intrahealth International, Management Sciences for Health, and PATH.

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Acronyms

E2A	Evidence to Action Project
ECP	Emergency Contraceptive Pill
ECSA	East, Central and Southern Africa Health Community
ECSACON	The East, Central and Southern Africa College of Nursing
FP	Family Planning
HIV	Human Immunodeficiency Virus
IUD	Intrauterine Device
LNGIUS	Levonorgestrel Intrauterine System
MEC	Medical Eligibility Criteria
MNCH	Maternal, Newborn, and Child Health
MoH	Ministry of Health
RH	Reproductive Health
SDM	Standard Days Method
STI	Sexually Transmitted Infection
TRP	Training Resource Package for Family Planning
UNFPA	United Nations Fund for Population Activities
UNMC	Uganda Nurses and Midwives Council
USAID	United States Agency for International Development
WHO	World Health Organization

Introduction

The Evidence to Action Project (E2A)—with a mandate to strengthen family planning and reproductive health service delivery globally—supported adaptation of the Training Resource Package for Family Planning (TRP)[1] to improve the quality of pre-service education in Tanzania and Uganda. By adapting this global tool to the contexts for pre-service education in the two countries, E2A sought to produce competent frontline health workers with the knowledge, attitude, and skills to strengthen family planning service delivery. E2A worked with several partners on this effort, including: The East, Central and Southern Africa Health Community (ECSA) and its college of nursing (ECSACON), Pathfinder International, the IBP Initiative, as well professional associations, regulatory councils, and national ministries of health and education, and nursing and midwifery schools in the two countries. This influenced policies and decision-making at both regional and country levels. E2A's assistance with adapting the TRP in Tanzania and Uganda to improve pre-service family planning education is described in report.

The Training Resource Package for Family Planning (TRP) is a comprehensive set of materials designed to support up-to-date training on family planning and reproductive health. The TRP was developed by a group of organizations and donors* using evidence-based technical information from World Health Organization (WHO) publications: *Family Planning: A Global Handbook for Providers;* the latest *WHO Medical Eligibility Criteria for Contraceptive Use*; and *Selected Practice Recommendations for Contraceptive Use*. The TRP contains curriculum components and tools needed to design, implement, and evaluate training.

**The development of the TRP was led by USAID, WHO, and, the United Nations Population Fund. Technical contributions were made by: Pathfinder International, with inputs from the Centers for Disease Control & Prevention; the International Planned Parenthood Federation; and USAID implementing partners EngenderHealth, FHI 360, the Institute for Reproductive Health, Intrahealth, Jhpiego, Johns Hopkins University, and Management Sciences for Health.*

Background

The benefits of improving pre-service education

Nurses and midwives comprise the bulk of the professional health workforce.[2] They provide a full range of nursing and midwifery services at all levels of the health system. The nursing and midwifery workforce is therefore key to improving the quality, efficiency, and availability of health services and strengthening the health system in countries around the world.[3] Tanzania and Uganda are no exception. Together, the two countries have more than 200 public and private nursing and midwifery schools at diploma and certificate levels accredited by their respective national Nursing and Midwifery Councils. An average of 1,200 to 1,500 nursing and midwifery students graduate annually in each country.

Pre-service education plays a critical role in developing the required professional competencies of nurses and midwives, preparing them for service provision in the long-term. The expectation is that when competent nurses and midwives graduate and are deployed with the requisite knowledge and skills to provide quality health services, they directly contribute to decreasing morbidities and mortalities.[4] Pre-service education therefore needs to be of high quality to impart the needed competencies for delivering quality health services.

High-quality pre-service education can be more sustainable than in-service training. Pre-service education trains large numbers of health workers for the long-term, unlike in-service training, which is often used to quickly accelerate competencies for a specific project or initiative. Pre-service education is also less costly than in-service training, which is conducted in a workshop-style setting and requires that health workers sacrifice time on the job in places where

human resources for health are already limited.[5] In-service training is also essential, but should be used to complement pre-service education through continuous professional development. This includes updating and ensuring retention of competencies, or building new competencies to introduce new technologies or policies.

Investing in strengthening pre-service education therefore constitutes an efficient use of resources toward improving maternal and newborn health. For example, well-trained, competent midwives are a primary cadre of skilled birth attendants. Increasing the number of competent nurses and midwives available to provide high-quality maternity care is critical to decreasing maternal and child morbidities and mortalities.[6,7] Likewise, strengthening pre-service education for family planning can, in turn, strengthen the delivery of family planning services—proven to improve health outcomes of women, newborns, infants, and children. Despite these benefits, pre-service education has remained underfunded, reducing the capacity for optimal infrastructure, trained educators, teaching equipment, and materials to produce sufficient numbers of competent nurses and midwives required for quality service delivery.[8,9]

Family planning contexts in Tanzania and Uganda

The Governments of Tanzania and Uganda recognize that family planning is a highly cost-effective means of improving health, reducing poverty, attaining national and international socio-economic and development goals, and promoting gender equity and women's empowerment. Tanzania and Uganda both have Family Planning Costed Implementation Plans that provide national guidance for investments that would move the countries toward meeting their national commitments, including their maternal and child health strategic plans, national development strategies, and FP2020 commitments. Meeting these commitments would reduce unmet need for family planning and increase the modern contraceptive prevalence rate to 50 percent among married women and women in union; by 2015 in Tanzania and by 2020 in Uganda. The commitments would also contribute to the Sustainable Development Goals by ensuring universal access to sexual and reproductive health and reproductive rights, improving gender equality, empowering women and girls, and reducing maternal mortality.

Reproductive health indicators from Tanzania and Uganda[10]

Population
Tanzania: 49.6 million
Uganda: 35 million

Modern Contraceptive Prevalence Rate
Tanzania: 27%
Uganda: 26%

Unmet Need for Family Planning
Tanzania: 22%
Uganda: 34%

Total Fertility Rate
Tanzania: 5.4
Uganda: 6.2

Maternal Mortality Rate/100,000 Live Births
Tanzania: 454
Uganda: 438

Despite these commitments, both countries face significant human resources shortages that hinder progress toward national and international family planning goals. Thus, in Tanzania and Uganda, contraceptive prevalence remains low, while fertility rates, unmet need for family planning, and maternal mortalities remain high. Uganda has one of the highest total fertility rates in sub-Saharan Africa, while Tanzania is among the countries with the highest maternal mortality rates. Rural, poor, and less educated populations in both countries tend to face greater barriers to accessing family planning services than their urban, educated, and better-resourced counterparts.

Nursing and midwifery schools in both countries face several challenges to offering quality pre-service education for family planning, including: the pressure to add new curricula components for emerging or increasing disease burdens, such as HIV and AIDS; the rapidly increasing size of the student bodies; ensuring the development of clinical skills; and

a shortage of educators and teaching resources. Improving pre-service education for nurses and midwives by addressing the following challenges could begin to fill some of the human resource shortfalls in family planning service delivery:

- Limited information on family planning in pre-service education
- Inconsistencies in family planning course content, skills acquisition, and quality of training
- Outdated content and use of theoretical, rather than competency-based teaching methods
- Lack of training resources at schools

ECSA's efforts to strengthen family planning/reproductive health pre-service education for nurses and midwives

ECSA, through ECSACON, has worked with its member states to strengthen family planning and maternal child health in pre-and in-service training. ECSACON, with technical assistance from partners, developed and disseminated family planning/reproductive health training materials to its members' states on topics that could be effectively taught using theoretical, rather than hands-on teaching methods, such as Standard Days Method, gender, and healthy timing and spacing of pregnancy. In a few countries, the local ECSACON country chapter worked directly with educators to use the training materials. Despite these experiences, efforts to systematically promote the use of these materials to strengthen curricula and pre-service education across the ECSA region have been hampered by resource limitations. ECSA has only been able to provide capacity building and follow-up to adapt and scale-up use of new materials to support pre-service education in a few member countries, and only a few schools in those countries. In addition, the impact of these regional efforts in ECSA's member countries has not been adequately documented or evaluated.

East, Central and Southern African Health Community (ECSA) is a regional inter-governmental health organization that fosters and promotes regional cooperation in health among member states. Member states of the ECSA Health Community are: Kenya, Lesotho, Malawi, Mauritius, Seychelles, Swaziland, United Republic of Tanzania, Uganda, Zambia, and Zimbabwe.

East, Central and Southern Africa Health Community College of Nursing (ECSACON) is an executing arm of ECSA charged with promoting and strengthening professional excellence in nursing and midwifery in the ECSA region. The mandate of ECSACON, "A College Without Walls," includes the harmonization of nursing and midwifery standards, improvement of the nursing and midwifery professions, creation of regional uniformity in the Nurses Acts, clear definition of the nurses and midwives' roles, and strengthening nursing and midwifery education and research.

In addition to support from ECSA, several global tools and curricula have been developed by nongovernmental organizations and other implementing partners, which are available online, such as through K4Health Toolkits. These tools support curricula development or adaptation by countries, yet there is little documentation of how countries have systematically used these tools.

Adaptation of the TRP to Improve Family Planning Pre-Service Education

To address these gaps, E2A worked with ECSA to both adapt the TRP to improve pre-service education curricula and use of competency-based training methods in Tanzania and Uganda. This report documents how this global tool was used to strengthen family planning/reproductive health training in pre-service education at country level.

Regional dissemination of the TRP

To create awareness and promote use of the TRP and other evidence-based family planning/reproductive health tools, E2A and Pathfinder International conducted a half-day pre-conference workshop at ECSA's 5th Quadrennial general meeting and the 11th Scientific Conference in Harare, Zimbabwe, in 2014. In addition to the TRP, the World Health Organization's (WHO) Medical Eligibility Criteria (MEC) for Contraceptive Use 2015[11] and the USAID Family Planning High Impact Practices Series[12] were disseminated. During the workshop, participants were oriented on the organization, content, and uses of the TRP. They learned how to access the TRP modules and about examples of how the TRP can be used for in-service training online. They then participated in a role-play demonstration of the TRP using the counseling module. Immediately after the workshop, representatives of South Africa, Lesotho, Zimbabwe, Uganda, and Tanzania approached E2A with requests to support in-country application of the TRP to strengthen family planning/reproductive health in both in-service and pre-service education curricula. E2A chose to focus on pre-service education given the advantages, particularly regarding its capacity for reaching a large body of health workers. At the pre-conference workshop, participants made the valuable recommendation of having the TRP on flash drives so that it would be accessible to educators and students in rural settings where the Internet connection is weak.

Participants, pre-conference workshop in Harare, Zimbabwe

- ECSACON
- Development partners
- Nursing and midwifery educators
- Regulatory councils
- Professional associations
- Service delivery managers
- Providers
- Student nurses and midwives from ECSA member countries, and Botswana, Sierra Leone, and South Sudan

Situational analysis of family planning in pre-service education

Following the pre-conference workshop, E2A adapted WHO's *Core Competencies in Adolescent Health and Development for Primary Care Providers*[13] to develop a questionnaire that was self-administered to pre-service education training institutions for nurses and midwives that are members of ECSACON in all ECSA countries. The questionnaire was used to gauge the extent to which family planning/reproductive health, including adolescent and youth sexual reproductive health and gender, are taught in pre-service education schools in the ECSA region. E2A received responses from pre-service education nursing and midwifery programs in Uganda, Tanzania, Lesotho, Zimbabwe, Malawi, and Swaziland.

Responses showed gaps across countries in topics taught, time allocated for family planning/reproductive health and for each topic, and the extent of practicum training. Based on this information, E2A identified country needs, and with guidance from ECSACON, selected Tanzania and Uganda—the two countries are among the 24 USAID priority countries that cumulatively represent more than 70 percent of maternal and child deaths. Also, Uganda had previously been supported by ECSA in collaboration with E2A to build capacity of a limited number of educators and supervisors on health timing and spacing of pregnancy.

After selecting the two countries, E2A and ECSA initiated a process to better understand the current situation of family planning/reproductive health training in pre-service education. Findings from both countries are described below.

1. *Dialogue with ECSA, the local ECSACON chapter, nursing and midwifery councils, and nursing leadership to better understand the policy environment, challenges the countries needed to address through application of the TRP, and to clarify expectations.*

Findings from both countries

- Nursing and midwifery councils accredit and regulate nursing and midwifery schools and determine the scopes of practice (including curricula content).
- Curricula must be competency based, learner focused, and updated every five years.
- Committee that includes policymakers, educators, content experts, regulatory councils, professional associations, an examination board, client representatives, and student representatives intensively reviews curricula prior to sanctioning by the nursing and midwifery councils.
- Family planning is taught under the reproductive course unit or module. [a]
- National ministries[b] and nursing and midwifery councils determine topics to be taught under each unit or module, and the total number of academic teaching hours allotted during clinical attachment to service delivery areas for practicum training.
- Each individual educator develops her own session plan using a standard template provided by the councils and determines the teaching method for each objective.

2. *Review of curricula, training resources, and capacities*

Findings from both countries

- Some schools were equipped with teaching materials and functional skills laboratories with models for practice, while others (particularly the private, for-profit schools) were not equipped.
- Schools had access to a health facility where students were deployed for practicum, as most were attached to a hospital.
- Clinical instructors and providers at practicum sites provided guided skills practice to students, but in most cases, were not trained as clinical instructors and lacked skills checklists to help them effectively teach students to perform each step or task, assess progress, and evaluate performance of each clinical skill.
- Family planning was taught mostly in second and third year prior to clinical attachment to the maternal, newborn, and child health clinic.
- There are few educators, although most are highly qualified to teach pre-service education.

Competency-based training is learning by doing. It builds and enhances specific knowledge, attitudes, and skills needed to carry out a procedure, task, or activity. Trainees' clinical skills are first developed in the classroom, in a simulated setting, using role plays or anatomical models, before they encounter clients in a clinical setting.

[a] A "course unit" in Uganda is a broad topic that includes objectives, knowledge, skills and attitudes on multiple interrelated topics, and a content outline for each topic. For example, the Reproductive Health Course Unit includes topics such as family planning, adolescent sexual and reproductive health, postabortion care, and prevention of mother to child transmission of HIV. A "course module" in Tanzania contains interrelated knowledge, skills, and attitudes and learning outcomes for one particular topic.

[b] In Tanzania, the Ministry of Health manages nursing and midwifery education, while the Ministry of Education manages nursing and midwifery education in Uganda.

- Some educators had received family planning training, but most had not had any refresher training for many years and were teaching with online resources or outdated hard copies of resources such as the *Family Planning: A Global Handbook for Providers.*[13]

Tanzania

- Updated the Ministry of Health and Social Welfare's pre-service education curricula for nurses and midwives in 2015 to expand the learning outcomes from client education and counseling that identified advantages of family planning and explained various methods to task-oriented learning outcomes. This included: client education; counseling for voluntary informed choice; provision of oral pills, injectables, natural methods, barrier method, long-acting implants, and intrauterine devices; and referral for permanent methods, which are also covered under in-service training.[c]
- 40 hours allocated to teaching of reproductive health module that includes family planning.
- Efforts made to orient all educators on use of competency-based teaching methods.

Uganda

- 40 hours allocated to teaching of reproductive health course unit.[d]
- Family planning listed in few bullets in the knowledge, skills, and attitudes matrix and content outline.
- Knowledge-based education and lecture is the most widespread teaching approach although there is some progress toward incorporating competency-based training approaches in the curricula for all certified courses in nursing and midwifery is in progress in Uganda.

3. *Three-day workshops*

E2A held a three-day preparatory workshop in each of the two countries for a core group that included representatives of ECSACON, nursing and midwifery policymakers, ministries of health, nursing and midwifery regulatory council leadership, in-service training managers, and representatives from each degree, general, and comprehensive nursing and midwifery pre-service education program. In Uganda, participants also included representatives from the Ministry of Education and Uganda Nurses and Midwives Examination Board.

Objectives of the three-day workshops:

- Familiarize participants with the current family planning/reproductive health policies and training in pre-service education for better understanding of how the TRP could be applied to address current gaps in training.
- Give participants an overview of family planning in-service training curricula and training materials that could provide local guidance on service delivery guidelines and standards to be included in pre-service education curricula.
- Review reproductive health curricula modules or course units to identify gaps in content.
- Introduce regional family planning training materials that could be used in alignment with the TRP.
- Clarify the expectations and plan for the follow-on five-day workshops.

[c] The Ministry of Health and Social Welfare has relied on in-service training to teach necessary competencies for provision of long-acting contraceptives, as pre-service training has not fully equipped them with these skills.

[d] Classroom teaching was divided into two-hour sessions spread over four weeks, and practicum attachment was four weeks for the entire reproductive health course unit or module.

Dissemination and demonstration of TRP

During the workshops, E2A demonstrated use of the TRP and other evidence-based family planning tools and resources including the 2015 MEC and USAID Family Planning High-Impact Practice Briefs. In Uganda, based on lessons learned from Tanzania, participants outlined knowledge and skills related to family planning taught in prior course units[e] that the educator could quickly review through methods such as oral question and answer, written pre-tests or quizzes, or preparing students through advance review in preparation for the family planning sessions.

To help familiarize participants with the organization and content and use of the TRP, participants selected one module for demonstration. The selection was based on need for technical updates, how difficult it was to teach, how often the content was already taught in the country, and the opportunity to demonstrate a variety of competency-based training methods. The Tanzania team chose the counseling module and the Uganda team selected the module on the Standard Days Method. Participants then discussed training gaps that could be addressed through application of the TRP.

Findings from both countries

At the end of the three-day workshops, participants shared what they recognized as major gaps in their family planning pre-service education training, including:

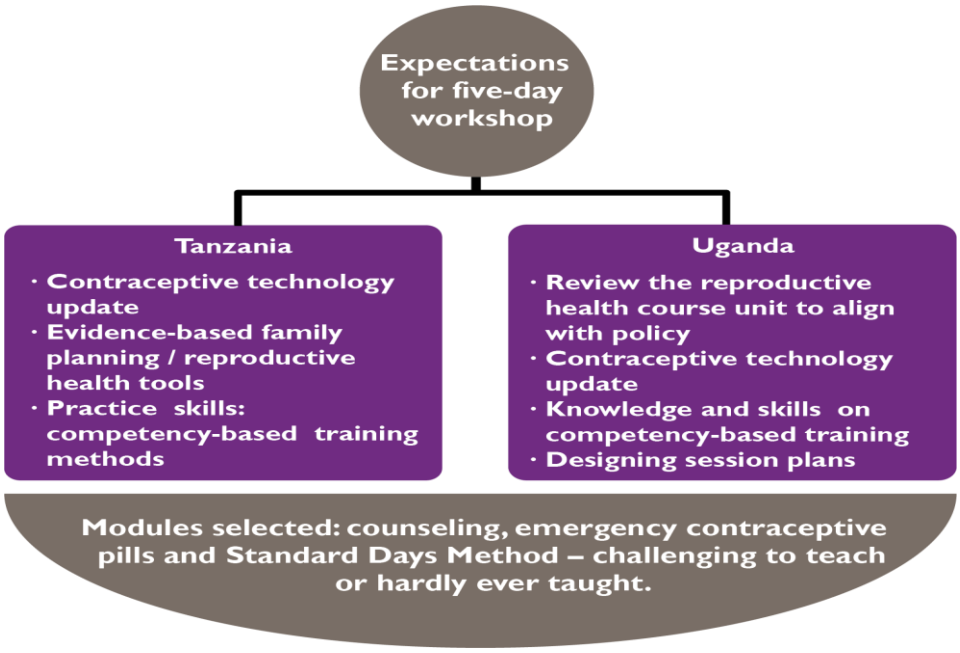
- Lack of evidence-based and up-to-date family planning content in curricula
- Outdated teaching methodologies, including methodologies centered on lecturing, with minimal capacity in and use of competency-based teaching methods
- Educators' limited knowledge and skills on family planning/reproductive health
- No uniformity in terms of content, time allocation, and teaching methods, especially related to:
  - Limited availability of training tools and resources at all schools; there is no standard list of training tools required at each accredited school (e.g., new teaching and reference materials, anatomical models for clinical practice, computers and visual aids)
  - Class sizes too large for use of competency-based training methods by one educator
  - Limited guidance on practicum training (objectives, skills checklists and assessment of students for level of competencies acquired)

[e] Knowledge and skills from prior course units or modules included: anatomy and physiology of the male and female reproductive organs, communication and counseling, history taking and physical examination, the nursing process and ethics in nursing that include some of the rights of the clients, such as right to privacy, confidentiality, informed decision making, nondiscrimination, and respect.

Five-Day Workshops

By the end of the three-day workshops and based on expectations developed there (Figure 1), participants developed a design and materials for five-day workshops in each country. They clarified co-facilitation roles and finalized the participant list. The participants from the three-day workshops were participants and co-facilitators of selected sessions at the five-day workshops. The following section describes the five-day workshops in each country.

Figure 1. Expectations for the training of educators/five-day workshops



Five-day workshop: Tanzania

During the first two days, 33 participants heard background information and the rationale for family planning training. They took pre-post knowledge assessment tests on contraceptive technology. Participants learned about the online version of the TRP and how it could be used. They went through a detailed demonstration of the counseling module and MEC facilitated by the Ministry of Health's National Coordinator for Family Planning/Reproductive Health, In-service Training. The National Pre-service Training Coordinator facilitated the session on competency-based training methods. Tanzania had just revised the learning outcomes, and these were reviewed, updated, and approved by the National Council for Technical Education after the workshop (Table 1).

At the workshop, participants received:

- Flash drive with TRP modules in individual folders
- MEC wheel and handouts
- USAID Family Planning High-Impact Practice Briefs
- Referral to K4Health online

Participants, five-day workshop, Tanzania

- Public-sector and faith-based nursing and midwifery schools
- In-service family planning/reproductive health training institutions
- One university
- Ministry of Health and Social Welfare
- Director General, ECSA
- President of ECSACON Tanzania

Table 1. Tanzania: revised learning outcomes and content outline

Before curricula review (2009)	Family planning curricula content and learning outcomes revised after the TRP workshop (July 2015)
Learning Outcome • Provide family planning (FP) services in the community **Content Outline** • Define FP • Identify advantages of FP • Explain various methods of FP • Counsel clients on FP methods	**Learning Outcome** • Provide FP services according to guidelines and protocols **Content Outline** • Define FP • Identify myths and misconceptions related to FP methods • Explain advantages of FP • Describe short-term and long-acting reversible contraceptive methods • Explain elements of FP service delivery • Take obstetric history and gynecological history • Perform physical examination • Counsel the client on informed choice • Screen client for medical eligibility for contraceptive choice • Initiate the chosen contraceptive method (oral contraceptive, injectable, implant, intrauterine devices, and natural and barrier methods) • Plan for a follow-up visit • Refer for permanent methods when appropriate (vasectomy, tubal ligation)

Hands-on practice

To practice adaptation of the TRP using competency-based training methods, participants divided into groups of three, and each group was randomly assigned a topic from the TRP. They then designed a 20-minute session using the standard lesson plan template for the country. The Ministry of Health's family planning/reproductive health in-service training unit provided teaching materials and models.

Each group presented their session to the other participants and explained how they used the TRP, and what modifications they made and why. Some groups made minor modifications based on what they believed were the needs of their students; other groups used the TRP without modification. For example, some groups changed the role-play scripts to localize them. Others made minor changes to TRP slides or omitted some slides as they felt they were irrelevant or too detailed for the level of their students. Most of the slides omitted were advanced and optional slides. Facilitators and the other participants gave feedback on use of the competency-based training methods and adaptation of the TRP. The participants also received a contraceptive technology update and engaged in hands-on practice with using competency-based training methods.

Lessons learned

- The family planning topic is part of a program and participants will have acquired knowledge and skills related to family planning from prior modules (e.g., most teams included an objective on applied anatomy and physiology of the female and male reproductive systems prior to the delivery of their sessions, which are taught in basic introductory sessions of the course).

- The process of adapting the TRP required time than originally envisioned for participants to develop their own lessons plans, aligned within the timeframes allotted to family planning. Thus, in Uganda, E2A added a second workshop to complete the process.
- Access to a laptop by all participants and Internet connectivity made it easier for them to quickly navigate the modules online and download reference materials.
- Having the TRP and some key reference materials on flash drives made it easier for participants to access the modules and training materials in each module of the TRP, which, in turn, made adaptation easier. Participants could copy, cut, and paste content to their lesson plan template and PowerPoint slides.
- Most participants experienced challenges using competency-based training methods, preferring didactic teaching methods. It would have been helpful for the facilitators to demonstrate use of competency-based methods, such as role play, demonstration, and return demonstration, prior to participants delivering their sessions.

Workshop evaluation and next steps

Pre-post knowledge assessment: A pre-and post-test written assessment was administered. On guidance from the participants from the three-day workshop, the pre-and post-questionnaire used in Tanzania had more family planning/reproductive health questions than competency-based training questions. At pre-test, 31% scored at or above the cutoff score of 80%. At post-test, 25% of the participants attained a score of 100% and 75% of the participants scored at or above the cutoff score. All participants showed an increase in knowledge.

Back-home application plans: At the end of the workshop, participants developed plans for how they will use their knowledge from the TRP, indicating intentions to share with fellow educators at their schools. Particularly, they mentioned that they would be likely to share the contraceptive technology update and the MEC, balanced counseling, and use of competency-based training methods with colleagues.

***Feedback*:** Participants felt the workshop arrangements and venue as well as the methodology—participatory approach to training, small group work, and presentations—were conducive for learning and that the objectives were met. Most participants expressed the need for more time to develop and deliver their session plans or at least have a second round of practice after the feedback. They recommended disseminating the TRP to all schools to standardize the training and for Ministry of Health and Social Welfare to plan regular updates for educators.

Feedback, five-day workshop, Tanzania

"I like the TRP very much and will share it with my colleagues. The only challenge will be how to adapt it to fit in with the time we have for FP training—but, as trainer, it is good to have everything in one place. The flash drives will help us as most of us do not have reliable Internet access."

- *Midwifery Educator*

"We recognized that we were stale on family planning topics. I like the TRP because it contains everything, and lesson plans, PowerPoint presentations, handouts, and some references, and this will make our work easier and save us time."

- *Participant Representative*

The TRP workshops have helped us to reinforce training policy on expectations for family planning/reproductive health training in pre-service education in terms of content and training approaches, updated trainer skills on use of competency-based training methods, and contraceptive technology update."

- *Training Program Manager/Policymaker*

Community of practice: To facilitate shared learning and follow-up, the IBP Initiative helped to establish a community of practice for Tanzanian participants on the Knowledge Gateway. The community of practice allows participants to access training materials, the training report, and other resources uploaded to the site. Trainers and the trainees can also interact and share knowledge and experiences in line with the TRP.

Five-day workshop: Uganda

The 32 participants for the workshop were selected by region and some came from as far as the border with South Sudan. In Uganda, the Uganda Nurses and Midwives Council (UNMC) (instead of the Ministry of Health and Social Welfare, as in Tanzania) led the workshops in coordination with the Ministries of Education and Health. [f]

Participants, five-day workshop, Uganda

- Comprehensive or degree nursing and midwifery schools including public, private not-for-profit and for-profit schools
- Uganda Nurses and Midwives Council
- Uganda Nursing and Midwifery Examination Board
- Ministry of Health
- Ministry of Education
- Director General, ECSA
- ECSACON Uganda
- Service providers from the practicum training sites

The process followed in Uganda was similar to the process followed by Tanzania. Based on lessons learned from the Tanzania workshop, the facilitators also included sessions on: the policy environment and status of family planning in Uganda, competency-based training and learner-focused learning, lessons learned from the TRP workshops in Tanzania, and an overview of the family planning/reproductive health workshops that ECSA conducted in Uganda, which some of the participants had attended.

Unlike in Tanzania, however, not all participants had a laptop or were computer literate, so facilitators printed hard copies of selected TRP modules for ease of use. Also, unlike in Tanzania, the Uganda curricula were long past due for review (the last review was 2003), and UNMC lacked the resources to review curricula. The TRP workshop was therefore perceived to be a major step toward review of pre-service education curricula.

After the session on the TRP, participants were divided into small groups to review the family planning topic in the midwifery and nursing curricula reproductive health course units and make recommendations on objectives, competencies, knowledge, skills and attitudes, and content outline. Participants listed the titles of family planning/reproductive health-related knowledge and skills from prior sessions. Some also reviewed the objectives of the entire Nursing and Midwifery program to clarify which of the general objectives included family planning/reproductive health. The small groups presented in plenary and together reached consensus on reproductive health course unit content. In addition to the modules in the TRP, participants added content on family planning/reproductive health concepts, local policies and standards, the status of family planning in Uganda, insertion of the Levonorgestrel Intrauterine System (LNG-IUS), cervical mucus method and permanent methods (Table 2).

[f] UNMC has a more primary role in Uganda than the ministries in terms of approval and accreditation of curricula.

Table 2. Uganda: revised learning outcomes and content outline

Before curricula review (2005-2008)	Revised objectives, competencies and content after the TRP workshop (December 2015)
Nursing Family Planning (FP) Objectives • Describe all FP methods Competencies • Provide all FP methods Content Outline • Define FP • History of FP • Benefits and disadvantages of FP • Management of FP services **Midwifery** FP Objectives • Assess clients for different FP methods • Explain FP services Competencies • Counsel clients on FP Content Outline • History of FP • Benefits and disadvantages of FP • Management of FP services • Monitoring and evaluation of FP services	**Objectives (Nursing and Midwifery)** • Identify clients for family planning/reproductive health (FP/RH) services • Communicate and promote FP/RH effectively to different populations groups • Counsel clients for voluntary informed choice • Provide clients with oral pills, progestin-only injectable, emergency contraceptive pills (ECPs), implants, intrauterine devices (IUDs), Standard Days Method (SDM), Cervical Mucus Method, and other barrier methods according to national FP/RH guidelines • Integrate FP with other maternal, newborn, and child health; sexually transmitted infection (STI); and HIV/AIDS services • Identify clients with FP/RH complications • Manage clients with FP/RH complications • Manage FP clients with STIs and HIV/AIDS • Refer clients for other FP/RH services appropriately • Document, manage, and utilize data related to FP/RH **Content Outline** • Define FP • Benefits of FP • Rights-based FP/RH service delivery • Counseling for FP; voluntary informed choice • Cultural beliefs and practices related to FP • Methods of FP/contraceptive technology a. Oral pills b. Progestin-only injectable c. ECPs d. Implants e. IUD f. SDM and Cervical Mucus Method g. Condoms – male and female h. other barrier methods • Medical Eligibility Criteria for contraceptive methods • Provision of FP methods • Elements of successful FP monitoring, FP/RH service delivery • Provision of FP for special groups (adolescents, postpartum clients, post-abortion care, HIV/AIDS, Ending Mother to Child Transmission of HIV, men) • Myths and misconceptions of FP

Hands-on practice

The Uganda workshop demonstrated use of the TRP using two modules: Emergency Contraceptive Pills and SDM. Content in these two TRP modules was new to most participants. Participants therefore requested that the facilitators demonstrate use of the TRP twice using these two modules; first, for learning about contraceptive technology and, again, for use of competency- based training methods. Small groups of three or four developed 20-minute session plans and used competency-based training methods—demonstration and return demonstration and role-play. Training schools provided materials for the practicum, such as pelvic models, equipment, and flip charts, and Uganda Protestant Medical Bureau provided CycleBeads. In plenary, participants started with an outline of relevant knowledge and skills students already acquired from previous course units and sessions, such as anatomy and physiology of the male and female reproductive systems. This was necessary to avoid what happened in Tanzania, where participants started off with teaching anatomy and physiology before teaching family planning methods, repeating what had already been taught. This also underscored the linkage between the course units of the entire

program. The presentations in Uganda were varied, but mostly showed capacity limitations on use of competency-based training approaches and family planning technical content.

Workshop evaluation and next steps

Pre- and post-knowledge assessment: The pre-post knowledge assessment included questions about competency-based training as this was cited as a major weakness among educators at the three-day workshop. The pre-post assessment in Uganda revealed much more limited knowledge of competency-based training and family planning than in Tanzania. Educators acknowledged that they teach family planning from old text books and the few that had ever received in-service family planning training had never received any refresher training. All the participants scored below the 80% cutoff score, and at post-test, while participant scores showed a significant increase, only 16% scored at or above the cutoff score. They were particularly challenged with questions related to competency-based training.

Back-home application plans: Most of the participants prioritized continued practice and reading to update their knowledge on family planning and share it with their colleagues. The ECSACON members planned to support the ministries and schools where needed.

Feedback: Most of the participants felt that the workshop was relevant and objectives were met, however, most participants wanted more time to develop their session plans and practice session delivery using competency-based training methods. Some of the participants said they initially found the TRP overwhelming and that it only became clear when they were adapting part of the session plans to develop their own 20-minute sessions. Participants made the following recommendations for further technical assistance:

- Develop session plans using the TRP that can be used by all educators in pre-service education and include tips on how to conduct simulations in places that do not have teaching resources such as anatomic models.
- Develop guidance on how to use the TRP to develop session plans in pre-service education.
- Adapt session plans to local context, align with allocated course unit and session time, and outline prior knowledge and skills at the top of each session plan.
- Disseminate the TRP and the adapted session plans to all schools.
- Update all educators' knowledge and skills in family planning and reproductive health.
- Review the nursing and midwifery course curricula in line with competency-based training.

Community of practice: As in Tanzania, the IBP Initiative, with the Uganda Family Planning Consortium Secretariat, helped to set up a community of practice platform on the Knowledge Gateway for each country. The platform includes training materials, the training report, and other resources. Trainers and the trainees can also interact and share knowledge and experiences.

Feedback, five-day workshop, Uganda

"I am very enthusiastic about the TRP that has been provided because it brings all the materials in one package. Previously, different schools have had diverse approaches to teaching family planning and personally I was depending on the available text books on family planning. It is also very good because we now have standardized information that will be disseminated to the students regardless of the school that they come from. This package will definitely ease my work."

- *Grace Nakku, midwifery tutor, Nsambya School of Nursing and Midwifery*

"This training was what we needed all along; I hope proper follow-up is made to ensure that the outcomes of the training are achieved."

- *Juliet Zawedde, nursing tutor, Kibuli PNFP School of Nursing, Uganda Muslim Bureau*

"Most of this was new to most us, even those of us who ever received some family planning training we have forgotten a lot and a lot of the content has changed."

- *ECSACON Uganda member*

After the Adaptation: How the TRP Has Been Used in Tanzania and Uganda

Tanzania

Six months after the workshops, according to follow-up with the National Training Coordinator who led the TRP workshops, the TRP was being used to develop post-training family planning tasks to be included in curricula for the newly established community health worker cadre. The National Council for Technical Education[g] validated and scored the updated family planning module very high in terms of competencies and structure. From the schools that participated in the five-day workshop, several the educators had started to use the TRP; mostly the session plans and PowerPoint presentations. Educators continued to express common challenges of reducing the content they adapt from the TRP enough to align with the time allotted family planning in their reproductive health course module. Most of the educators had shared the TRP and what they learned from the workshop with colleagues.

Uganda

Six months after the workshops, Ugandan educators from faith-based schools who had started using the TRP said they found the session plans and flash drives with the TRP content very useful. The workshop to develop a *Trainer's Reference Guide*, described below, provided an opportunity for in-depth review of how the TRP was being applied in Uganda.

Development of Trainers Reference Guide

In response to requests made at the previous workshops E2A conducted a two-week follow-up workshop for the same group of educators from the five-day workshop, where the TRP was adapted to develop a *Trainers Reference Guide*. The reference guide includes session plans that reflect the updated and approved family planning objectives, and content outline developed at the five-day workshop and is designed to guide educators on how to teach the new content in the time allotted to family planning in the reproductive health course unit.

[g] Reviews and validates all technical curricula approved by the Nurses and Midwives Council.

On the first day, the educators reviewed the updated course unit and shared how they had applied the TRP. Some had taught family planning directly from the TRP and found that the time allotted to the sessions was too long.[h] Some had developed their own session plans and others had oriented their colleagues. TRP content educators in Uganda found the following helpful:

- *PowerPoint presentations:* They had either reproduced these or copied them on a flipchart so that they could use them for teaching.
- *Session plans:* They had been using the session plans to develop the plans for their own continued learning. They said the TRP was a major knowledge resource.
- *Practicum demonstration skills:* Demonstration procedures (such as for IUD insertion) were easy to follow.
- *Skills checklists:* Educators gave these to students for clinical training and used the checklists to prepare for demonstration of procedures and observation tools during practicum.

TRP content educators in Uganda found the following challenging:[i]

- Some of the training methods in the TRP were not possible to teach as the class was too large to divide into small groups or get adequate practice for role-play or return demonstrations.
- Some schools did not have an equipped skills lab and students had to wait to go to the family planning clinic to observe demonstrations; the large numbers made it a challenge to have everyone conduct return demonstrations on the same day.
- Developing two-hour session plans from a three-day session was difficult and most felt that everything in the TRP session plan was important; they needed guidance on how to fit everything in reduced time or omissions.
- It was difficult to focus the students on the learning and not acting during role play. They acknowledged that the limitation was with the teaching, as the instructions to role-players and observers were not clarified and there were no observation checklists or tools provided.
- Providers in the clinical area were not familiar with the MEC 2015 and tended to contradict what the students had been taught in class.
- Sessions were missing from the TRP, such as logistics management and record keeping.

The participants requested input on use of competency-based training methods, such as role plays and demonstration of procedures, such as LNG-IUS, IUD, and implant removals. These procedures were covered over a period of two days and included short input sessions, demonstrations using the role-play scenarios from the TRP, and practice in small groups. The preceptor from Mulago family planning clinic performed demonstration of implant and IUD insertion. The preceptor also gave tips on how to use competency-based training with large groups of students. The tips were included in the *Trainers Reference Guid*e.

There was a long discussion on time allocation. Family planning is part of a 40-hour course unit that is spread over four weeks and taught in not more than two-hour sessions. The total time allocated for the family planning topic is about 18 hours of classroom theory. The educators reached consensus on the content and time allocation for session plans (Table 4).

[h] Standard sessions are two hours.

[i] Some challenges were directly related to the TRP, while others were related pre-service education in Uganda generally.

Table 3. Development of Trainer's Reference Guide: content and time allocation for session plans

TIME	OBJECTIVES	SKIILS AND COMPETENCIES	CONTENT OUTLINE
1.5 Hours		Review of relevant content	Review prior knowledge and skills – pre-test on anatomy and physiology, communication and counseling skills, nursing process and nursing ethics
2 Hours	Describe the concepts of family planning (FP)	*(Additional not in TRP)* • Communication • Counseling • Interpersonal communication	• Define reproductive health (RH) • Components of RH • Define FP • Clients' rights • Ethical and legal issues • Compliance • Integration of RH • Elements of successful /quality FP service delivery • Benefits of FP • Cultural beliefs related to FP • Community mobilization
2 Hours	Counsel clients to voluntarily choose a FP method	• Counseling	• Balanced counseling
8 Hours	Describe the FP methods	• Oral pills • Progesterone-only injectable • Emergency contraceptive pills • Implants • IUDs (Copper-T and LNG-IUS) • Lactation Amenorrhea Method • Standard Days Method & other natural methods (NFP)(*Other NFP not in TRP)* • Barrier methods • Medical Eligibility Criteria Permanent Methods *(Additional not in TRP*)	• What each method is • How it prevents pregnancy • Effectiveness compared to other methods • Eligibility criteria • Advantages, disadvantages • Side effects and complications • Dispelling myths and misconceptions
3.5 Hours (2 theory, 1.5 demonstration)	Provide FP methods	• Counsel clients • Communicate effectively • Provide clients with method of choice	• Counsel for voluntary informed choice of FP method • Initiate clients on chosen FP • Note: *For Injection, IUD and Implants insertion include review of Infection prevention from previous surgical course units.* • Give instructions on method • Set return date and follow-up • Provide FP for special groups • Document • Refer for permanent methods • Manage routine follow-up
1.5 Hours	Identify and manage complications	• Manage clients with FP complications • Manage clients with STIs/HIV and AIDS • Refer	• Identify FP complications • Manage FP complications • Manage clients with sexually transmitted infections/HIV/AIDS • Make appropriate referral
1. 5 Hours		*(Additional not in TRP)* • Logistics management • Record keeping • Monitoring services	Manage FP supplies and commodities: • Maintain inventory, and manage stocks • Collaborate with other service providers • Institute and use health information system for FP

Participants agreed to develop session plans using the standard template available for the entire curriculum. However, educators used the template differently. Participants divided into small groups and were each assigned a content area to work on including the recommended additional sessions (Table 4). Participants were guided to adapt the TRP session plans for the allocated time and to use other resources to develop the session plans including PowerPoint presentations, role-play scripts, demonstration methods, case studies, and skills' checklists.[j]

In plenary, each small group co-facilitated part of their session to the larger group. Participants refined their session plans based on feedback from their peers and facilitators. By the end of the two-week workshop, participants had developed the *Uganda Family Planning Trainers Reference Guide for Pre-Service Education for Nurses and Midwives.* The UNMC, Commissioner Nursing Services, and ECSACON Uganda Chapter endorsed the guide.

Summary of Lessons Learned from Tanzania and Uganda

- **Hands-on support for adaptation of the TRP to local contexts contributed to stakeholders' knowledge about the TRP and encouraged application of best practices to strengthen family planning training.** The TRP is a significant resource and it can be adapted for pre-service education to provide updates on contraceptive technology and use of competency-based training. Adaptation of the TRP to strengthen family planning training in pre-service education for nurses and midwives addresses a big gap in reaching the health workforce with up-to-date knowledge, readying them for service provision upon deployment to healthcare practice.

- **Working with regional institutions that support nursing and midwifery education and practice, such as ECSACON, can rapidly create awareness and promote use of global tools.** ECSA, through ECSACON, was already working with its member states to strengthen family planning and maternal and child health in pre-and in-service training. Technical assistance with adaptation of the TRP and documentation of the experiences in Tanzania and Uganda are demonstrating to ECSACON approaches to rapidly scale up use of the TRP and other regional, evidence-based tools to member countries to strengthen training and service delivery.

- **A participatory approach that includes policymakers, regulatory councils, and professional associations for training and service delivery is critical for policy guidance, and sanctioning and use of revised curricula.** Part of the success of this training emanated from E2A's collaboration with national ministries and regulatory councils at a time when the ministries were either in the process of reviewing or planning to review pre-service nursing and midwifery education curricula and moving toward competency-based training. The ministries had therefore recognized that family planning content was weak and had an immediate need to revise curricula toward a competency-based model to align with policies.

- **In settings without Internet or weak Internet, the TRP can be placed on a flash drive and distributed.** A major lesson learned from the pre-conference workshop was the need to have the TRP on a flash drive for ease of access and reduced reliance on the Internet.

[j] Other resources used to develop the session plans for additional sessions not in the TRP (Concepts in Family Planning, Cervical Mucus Method, and Permanent Methods) were: *Family planning: A Global Handbook for Providers, 2011*; resources from K4Health and from the World Health Organization; Uganda reproductive health service guidelines and in-service training curricula.

Recommendations to Tanzania and Uganda and other ECSA Countries

- **Along with adaptation of the TRP, develop a generic guide on use of the TRP for pre-service education.** A *Trainer's Reference Guide*, such as the one developed in Uganda, can show educators how to develop session plans from the TRP modules that can be taught within the tight time constraints for pre-service education.

- **Consider adding content or modules to the TRP to ensure effectiveness in ECSA countries going forward.** The organizations charged with updating the TRP (USAID, WHO, United Nations Population Fund) should consider how the TRP can address the following through the addition of modules on:
    - Assumptions of prior knowledge and skills, such as applied anatomy and physiology of the male and female reproductive organs
    - Basic concepts in family planning including the meaning of terms such as rights-based family planning, health timing and spacing of pregnancy, etc.
    - Family planning policies and guidelines and strategies in the country
    - Dispelling local myths and misconceptions about family planning methods
    - Record keeping, monitoring, and logistics management
    - Permanent methods
    - Gender and adolescent and youth sexual and reproductive health

- **Build capacity of a core group of educators to disseminate the TRP and schools to reinforce training.** Ministries of health should always endeavor to include pre-service educators and regulatory councils in updates, refresher trainings, and dissemination of policies. All nursing and midwifery schools should also have the capacity to use the reference guide and reinforce family planning training by including family planning questions in final examinations. Continuing medical education for nurses and midwives should include topics on family planning.

- **Systematically update the knowledge and skills of pre-service educators and clinical instructors on a regular basis.** In the long run, pre-service training in family planning is more cost effective than in-service training. Pre-service training, however, requires that educators, and, in particular—clinical instructors—have up-to-date knowledge and skills and schools are equipped with teaching aids such as models and a variety of resources.

- **Document adaptation and use of the TRP by various countries.** The experience with adaptation of the TRP in Tanzania and Uganda should continue to be evaluated to generate more lessons learned and to realize the effect of the trainings on service-delivery capacity. The evaluation should include educators and students taught using the adapted lesson plans in Uganda and what individual trainers in Tanzania developed on their own from the TRP or how they used the TRP without standard lessons plans. Adaptations in other countries where the TRP has been disseminated should also be documented to continue to contribute to knowledge around adaptation of a global tool to improve family planning service delivery practices at country level.

Conclusion and Next Steps

E2A's work in Tanzania and Uganda has paved the way for systematic adaptation of the TRP and capacity building of pre-service educators and clinical instructors in the two countries. Adaptation of the TRP has resulted in opportunities to: review and update family planning/reproductive health training guidelines for pre-service education; integrate evidence-based family planning practices into service delivery systems; contraceptive technology updates; and strengthening capacities in use of competency-based training methods among multiple trainers from the public and private sectors. Through ECSA's dissemination of the experiences in Tanzania and Uganda with the TRP, there has been heightened interested among ECSA member countries in seeking assistance from ECSA to apply the TRP and other regionally developed tools to strengthen both in-service and pre-service family planning/reproductive health training.

Addressing gender and youth in pre-service education

As a next step, E2A is working with educators in Tanzania and Uganda to integrate youth and gender content into pre-service education curricula to adequately prepare students to provide adolescent-friendly reproductive health services and address provider bias toward adolescents seeking services. Although adolescent and youth sexual and reproductive health is a separate topic in reproductive health course units taught to nurses in each country, the content does not address age-related bias in terms of eligibility for contraception.

Once the new content has been integrated into course units in each country, E2A will build the capacity of midwifery and nursing school faculty and trainers to scale up application of the updated/revised TRP modules, including youth and gender components, to multiple schools. Finally, E2A intends to document use of the adapted TRP modules updated course units by nursing and midwifery educators to assess the effect of family planning learning on nurses' readiness to provide family planning services at deployment.

How-To Guide

Based on this documentation report, E2A is developing a "How-To" Guide, which will allow other countries to use similar processes in their own countries to disseminate and adapt the TRP to improve pre-service education in family planning. E2A will work closely with ECSA and pre-service education institutions with which E2A has already collaborated in Tanzania and Uganda to develop the guide. E2A is also developing youth and gender modules for pre-service education that can be incorporated into the TRP and used globally.

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