

PN-ACW-552

**TRAINING
in AFRICA:
best practices,
lessons learned
and future directions**

CONFERENCE
PROGRAM
and
SESSION
MATERIALS

DAY III

JHPIEGO, an affiliate of Johns Hopkins University, is a nonprofit corporation **working** to improve the health of women and families throughout the world.

www.jhpiego.org

JHPIEGO Corporation
Training in Reproductive Health project
1615 Thames Street
Baltimore, Maryland 21231-3492, USA

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August 2003

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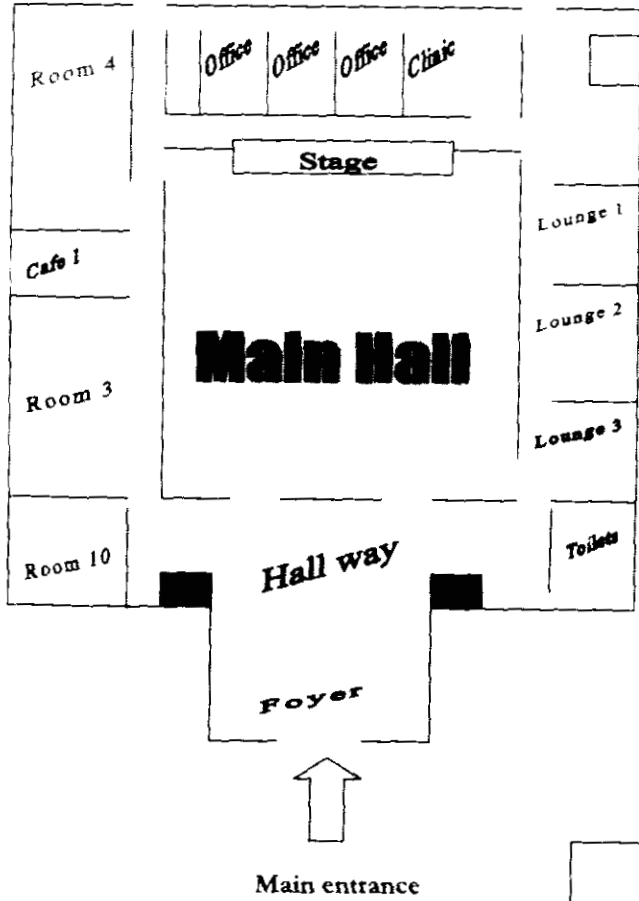
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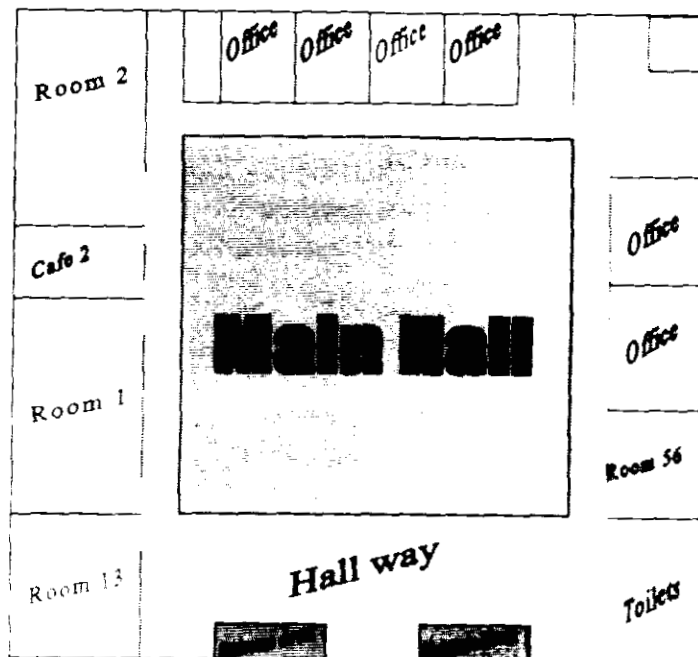
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MAP of CONFERENCE FACILITY



GROUND FLOOR PLAN

FIRST FLOOR PLAN



DAY III AGENDA



General Session

Room 3 and Room 4

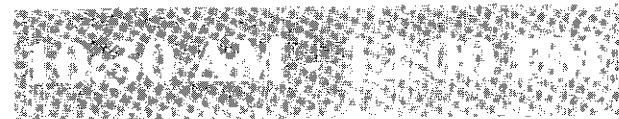
Training Works!

Rick Sullivan

JHPIEGO

Wallace Hannum

Intrah



Concurrent Sessions

Room 4

Ignite Your Training with the Power of Video

Cheryl Tryon

Centers for Disease Control and Prevention (CDC)

Video is one of the most powerful mediums that can be used in training. This session explores different types of training videos and the advantages and disadvantages of this medium. In addition, a systematic process for developing a video will be provided that includes: formulating a budget, creating a schedule, working with production crews, developing the script, etc. Attend this session and learn how your training courses can be enhanced with this exciting and versatile medium.

Room 3

Strengthening Preservice Education: A Systematic Approach and Lessons Learned

Lois Schaefer

JHPIEGO

Kwadwo Mensab

JHPIEGO Consultant

Preservice education is essential for ensuring that an entire cadre of healthcare providers is equipped with the basic competencies required to fulfill their job responsibilities. Improving the quality of teaching during this formative period is, therefore, an effective approach to improving service delivery practices. This session will share JHPIEGO's experience in strengthening preservice education for medical, nursing and midwifery programs. A systematic approach that includes the need to address relevant advocacy and policy issues; a process for strengthening curricula; preparation for and implementa-

tion of the strengthened curricula, and evaluation of preservice interventions will be described and illustrated with lessons learned from programs in Ghana, Uganda, Kenya, the Philippines, Turkey and other countries.

Room 2

Cost & Results Analysis (CRA) to Support Selection and Evaluation of Training

Approaches in Africa

Wallace Hannum

Nancy Kiplinger

Intrah

This session will focus on a CRA application in Ghana, where cost and results of alternative approaches for Safe Motherhood training for midwives are being tested. It will also briefly present some other applications of CRA in Africa. The presenters will present methods and tools developed or adapted, including tracking of direct costs of the alternative training approaches and the time and opportunity costs for the training participants. They will also discuss the results with which program costs are being linked.

Lounge 1

An Assessment of Implementation of Action Plans Developed by Trainees

Aloys Ikinigumugabo

Florence Nyamu

Betty Chirchir

Esther Nagawa

Center for African Family Studies (CAFS)

In each CAFS course, participants develop action plans. CAFS has developed instruments to assess the implementation of these action plans. The presentation will focus on the assessment that is based on the findings of the data collected from the participants of CAFS courses in 2000-2002. The data will cover initiatives undertaken as a result of the course, activities implemented and the constraints and the past participants encountered in the course of implementing their action plans. The data will also highlight the gaps shared by participants versus their own job requirements and emerging needs.

Lounge 2

Using Evaluation Results to Improve Integrated Management of Childhood Illnesses (IMCI) Preservice Training Delivery

Yvonne Botma

University of the Free State

DAY III AGENDA

The School of Nursing (SoN) at the University of the Free State in South Africa incorporated the IMCI strategy into their undergraduate nursing program in 2001. During the first year of implementation, the SoN modeled their training on the in-service training approach using the WHO training materials. However, at the end of the first year of implementation several factors underscored the need for change to the delivery method. The student's qualitative and quantitative assessment reflected this less than ideal situation. In reviewing the IMCI course, the SoN consulted its multimedia instructional designer for possible solutions. This session will further delineate how the SoN addressed the learning problem and how technology was used in addressing the problem.

Main Hall

Echoing Information: An Effective Way of Reaching Many Providers in Africa

Pamela Lynam

JHPIEGO

This presentation will describe the background and rationale for the intervention, the design steps, materials and approach, and the planning and implementation of a successful approach to improving the knowledge and behaviors of large numbers of providers in an efficient and cost-effective way. An echo or cascade approach to orienting providers was developed. Key aspects for the success of this intervention were the design and development of excellent, user-friendly materials, and an interactive training approach that can be easily replicated.

The results of a rigorous evaluation carried out by sister organizations (Family Health International and Population Council) will be presented. These results show that using this approach resulted in significantly changed knowledge and practices, and reached between 65% and 110% providers. Significant lessons learned about key reasons for the success of this program will be presented.

Room 13

"Pattern Language," a Tool for Designing Spirited Training

Mary Mujomba

Centre for African Family Studies (CAFS)

The purpose of this session is to explore the concept of "pattern language" an exciting new tool for designing training for experienced trainers. By revealing how a "pattern language" can be used to design more spirited learning environments, we will be able to start training with a new spirit. The concept of "pattern language" will be explained and the basic "pattern language" will be demonstrated. The session will be interactive and will allow beginning trainers to make their own "pattern language" words. The patterns can be used to design an exciting training environment and help create a more vibrant and spirited learning space.

Room 1

Process to Develop Training Materials and Programs on Malaria during Pregnancy

Mathias Yameogo

JHPIEGO

Malaria infection during pregnancy poses a substantial risk to the mother, her fetus, and the newborn. International evidence has shown that the process of IMCI implementation primarily reduces the risk of malaria during pregnancy for men and her unborn child. JHPIEGO/MNHC has developed a generic Malaria Training Worksheet based on international clinical best practices to help providers, trainers and train providers to provide quality services in the prevention and control of malaria during pregnancy throughout Africa. As this worksheet is implemented in various African countries will be able to adapt it to meet their own specific country needs. The Malaria Training Worksheet emphasizes best practices in training with special attention given to 1- Focused Approach, 2- Malaria Prevention and 3- Malaria Treatment training program with an

1:30 PM - 3:00 PM

Concurrent Sessions

Room 4

Essential Learning Methodology- Refining Content Selection and Tuning Instructional Strategies

Wallace Hamm

Imperial No. School of Medicine

Essential Learning Methodology (ELM) is a content approach that will change the way we think about content development and training. The ELM seeks to reduce the time and cost of content development by providing a systematic approach to content development. The ELM is a systematic approach to content development that is based on the concept of "essential learning" and is designed to be used by trainers and train providers. The ELM is a systematic approach to content development that is based on the concept of "essential learning" and is designed to be used by trainers and train providers. The ELM is a systematic approach to content development that is based on the concept of "essential learning" and is designed to be used by trainers and train providers. The ELM is a systematic approach to content development that is based on the concept of "essential learning" and is designed to be used by trainers and train providers.

Room 3

Preservice Education: Lessons Learned from East Africa

Dorothy Andere

JHPIEGO

DAY III AGENDA

This presentation will describe the process (needs assessment, planning, materials development, implementation, evaluation) of preservice reproductive health programs in Kenya and Uganda, for both nurses and doctors.

Preservice programs were implemented in both Kenya and Uganda, both with the medical schools (Makerere and University of Nairobi at Kenyatta Hospital) and nursing schools throughout the countries, nine in Uganda and thirteen in Kenya. There were various content areas covered, relating to reproductive health.

The needs assessments done before the programs, and the evaluation reports will be drawn on to illustrate some of the lessons learned about how to plan for and implement such programs in the future.

Room 2

Effective Methods of Training Community-based Health Workers

Salim B. Sobani

Charles Ombwa

Aaron Mulaki

Aga Khan Health Service

In last 2 decades we have trained over 3000 community-based health workers to promote PHC services. It is learnt that training per se is not working. The assumption that training master-trainer at community level will led to training of CHWs is misleading. What worked depends on factors including right selection of the CHWs for which we have developed a tool. A self-reflective methodology was used during training to assist trainees understand the personal hindrances that obstructs them achieve their goal coupled with onsite follow-up assistance. The result of the training showed three-fold increase in utilization of reproductive health services. The approach is easily replicable.

Lounge 1

Participatory Training to Reduce HIV Transmission and AIDS-related Stigma/Discrimination

Damien Wohlfahrt

Asiwa Obishai

EngenderHealth

The session will present strategies designed to reduce HIV transmission and AIDS-related stigma and discrimination in health facilities in Africa using innovative participatory training and quality improvement methodologies. This workshop will give trainers tools to address these issues with health care workers during on-site, whole-site training that integrates training topics and methods that are traditionally treated separately. There are three prongs to the approach: Addressing HIV-related fears, stigmatizing attitudes and biases; Identifying and

affirming the rights of clients and the needs of providers; and Educating staff about infection prevention and empowering them to collectively find ways to improve practices.

Lounge 2

Using Operational Standards to Enhance Transfer of Learning in Malawi

Sylvia Msokera

Lilongwe Central Hospital

JHPIEGO

Lunah Ncube

JHPIEGO

JHPIEGO has been working with the Malawian Ministry of Health and Population (MoHP) since 2001 on an initiative to improve infection prevention (IP) practices in seven hospitals. National IP operational standards are being used for baseline assessment, provider training and continuous monitoring and evaluation. Providers have used these standards as a job aid following training in order to maintain performance and to train others at their sites. Monitoring data show that use of these standards as a job aid and as a self-paced learning tool has contributed to significant improvement in IP practices at the pilot sites.

Main Hall

Training in Integrated Maternity/Postabortion Care in Kenya

Joseph Ruminjo

Isaac Achwal

EngenderHealth

The session will focus on the lessons learned from programming training interventions to integrate maternity and postabortion service delivery in a SIDA-funded project in three provinces in Kenya. The project was designed to "re-integrate post-abortion and maternity" care services using a district approach, with service interventions introduced at the district hospital and health center levels. Interventions included individualized training, using humanistic and hands on methods, and the use of quality improvement approaches such as COPE, Community COPE and the Cost Analysis Tool. The session will document the value of individualized competency-based approaches to service training.

DAY III AGENDA

Room 13

Disseminating Information for Scaling-up Implementation of Guidelines and Better Practices

Richard Hughes

Maureen Chilila

JHPIEGO

Martha Ndblovu

National PAC Task Force

Joseph Nikisi

Central Board of Health

We will present the Zambian experience with three approaches to national dissemination, including: a 1-day dissemination of malaria-in-pregnancy guidelines; a 3-day orientation for post-abortion care; and a 2-week skills training in infection prevention. These programs depend on the development of specific, standardized materials to support the dissemination and to ensure that the content covered was comprehensive and consistent.

The choice of approach for a specific dissemination activity depends on the quantity as well as the type of the content to be covered (i.e., skills versus knowledge; new information versus updates; etc.), as well as on the availability of resources. These resources include the funding, certainly, but also particularly the time – both the time pressure to disseminate information quickly as related to the desire to disseminate it effectively, and the time availability of the targeted audience (and the dissemination team as well).

Room 1

HIV/AIDS Training in Eastern and Southern Africa: Results from a Twelve-country Needs Assessment

Jacqueline Makokha

Regional AIDS Training Network (RAIN)

Betty Chirchir

CAFS

The Regional AIDS Training Network (RAIN) and the Centre for African Studies (CAFS), with the support and collaboration of USAID, have recently completed an assessment of training needs for HIV/AIDS. The study, which involved desk reviews of training policy, meetings with representatives of training institutions, and semi-structured interviews with key informants, was piloted in Kenya and carried out in detail in eleven countries in Eastern and Southern Africa. The results are still being analysed, but in general they reveal that despite all of the initiatives and rhetoric of the last ten years, the need for training in all countries remains acute. The priority topics

for training vary according to the cadre, but in general there is a widespread demand for training in program management skills, counselling and communication, working in the community and basic information on HIV/AIDS, along with training in emerging technical areas, such as prevention of parent-to-child transmission, use of antiretrovirals, etc. Of note is the distressing lack of curricula on AIDS at the undergraduate level despite the widespread knowledge of the epidemic's presence in the region for more than fifteen years. The presentation will review the methodology of the study, look at some simple results of the regional report, and indicate ways that these results might be translated into a training and capacity development strategy for the region.

3:30 PM - 4:30 PM

General Session

Room 3 and Room 4

Looking Back, Thinking Ahead: Shaping Today's Best Practices with 20 Years of Lessons Learned

Pauline Mubumbu

Intra-PRIME

Training Works!

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Looking Back, Thinking Ahead: Shaping Today's Best Practices with 20 Years of Lessons Learned

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Plan to stay for an inspiring and exciting closing session . . .

Looking Back, Thinking Ahead:
Shaping Today's Best Practices
with 20 Years of Lessons Learned

Pauline Muhuhu

Intrah/PRIME II Regional Director, East and Southern Africa

She knows what you are facing. A long-time leader in the field, Muhuhu will reflect on the major accomplishments of the last twenty years in the region and prepare us for the new era on its way:

- Results orientation
- Whole-site involvement to ensure performance
- Supportive supervision
- Skills development for specific deliverables
- New approaches
- Expanding technologies

Pauline Muhuhu will draw on the wisdom of four decades of experience in East and Southern Africa. From midwife to trainer to regional director, she has spearheaded action to improve training and technical assistance, build institutional capacity, and develop guidelines, standards and curricula.

Hear what she can tell us now!

Ignite Your Training with the Power of Video

Cheryl Tryon

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Strengthening Preservice Education: A Systemic Approach and Lessons Learned

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**Strengthening Preservice Education:
A Systematic Approach
and Lessons Learned**

JHPIEGO



Dr. Anabel Menjívar
Human Resource Management Director, Latin America
Panama

Agenda

- Introduction
- Why Preservice Education and Mary's Story
- The Process of Strengthening Preservice Education
- And It Works! Evidence from the Field and Lessons Learned

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Objectives

After attending this session, participants **will be able to:**

- Identify the advantages and challenges of strengthening preservice education
- Identify the components of preservice education
- Describe a process for strengthening preservice education
- Describe lessons learned from the field

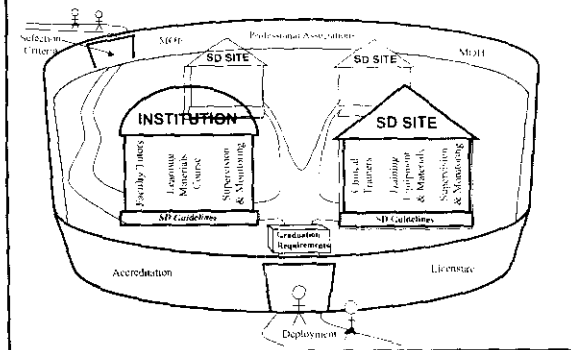
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What is Preservice Education?

- Prepares students to become FP/RH healthcare providers (physician, nurse, midwife)
- Learning that takes place in undergraduate and graduate healthcare educational institutions (e.g., medical, nursing and midwifery schools) over a period of 1-6 years
- Ensures a basic set of skill competencies for a general healthcare provider (ideally, based on a job description for after graduation)

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Preservice Education System for Preparing Healthcare Professionals



Advantages of PSE

- Reaches more providers at once than through inservice training
- Ensures common knowledge/skills based on updated RH policies and standards, thereby facilitating their dissemination
- Faculty are advocates for and role models of quality RH service provision
- What students learn in preservice, is often how they practice throughout their careers
- Extended learning period for skill and attitude development
- More sustainable as it strengthens existing educational institutions
- Development of model service delivery sites and providers

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Mary's Story...

- 18 years old – wants to become a midwife
- Midwifery School:
 - Class size: 50-70 students, with one or two teachers
 - Classes are lecture style—takes meticulous notes, few reference materials
 - Teachers have not maintained their clinical skills
 - Classrooms and equipment are old and/or not functioning



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Mary's story continues...

In the clinic:

- Teacher must "supervise" 10 students
- Clinical preceptor provides different—sometimes conflicting—information
- Too much "down time" e.g. poorly planned, not enough clients

Only written exams for assessment and licensure

Deployed to a remote site with little support and supervision

Poor linkages between MOH, MOE and teaching institutions

- Need strong commitment to competency-based training
- Coordination between schools (MOE) and clinical sites: MOH is often limited

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Mary's story continues...

Once posted ... does she have adequate skills to offer needed services?

Often the answer is "No"

- Regular inservice training needed
- Motivation for new skills – "add on"
- Low salaries



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So... How Do We Improve This Situation?

- Increase the focus on skill development through use of mastery learning and competency-based training
 - Learning by doing
 - Focuses on specific knowledge, attitudes and skills needed to fulfill job responsibilities
 - Emphasis on performance, not knowledge
 - Uses a humanistic training approach, i.e., using *anatomic models* to ensure competency before working with clients

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Continuum of Interventions for Preservice Strengthening

- A module/section in part of a 2- or 3-year curriculum
 - *Classroom portion* followed by clinical practice then or later
- Strengthening multiple courses, multiple years or even an entire curriculum
- Internship year, Ob-Gyn or FP/MCH rotation

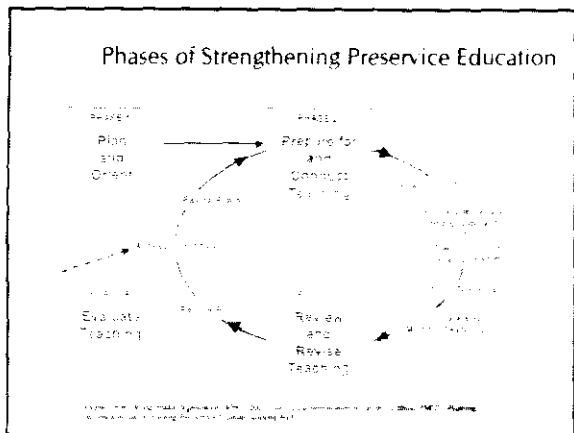
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Best Practice for Strengthening Preservice Education

A process to incorporate mastery learning and competency-based training into health professional schools that addresses all of the elements of the preservice education system

Based on JHPIEGO's experience strengthening preservice education in 21 countries.

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- ### Phase 1 – Plan and Orient
- Create a national working group
 - Conduct a needs assessment
 - Develop a national plan of action
 - Orient opinion leaders and decision-makers
 - Create a curriculum strengthening group

- ### Phase 2 – Prepare for and Conduct Teaching
- Train the curriculum strengthening group
 - Technical update/skills standardization if appropriate
 - Clinical training skills
 - Strengthen the curriculum
 - Develop and produce teaching, learning and assessment materials
 - Equip the teaching institutions

Phase 2 – Prepare for and Conduct Teaching (continued)

- Plan for implementation in each institution
- Orient decision-makers, additional faculty and clinical staff at each teaching institution
- Train additional teachers and clinical staff
- Prepare clinical practice sites
- Coordinate teaching
- Conduct and monitor teaching
- Conduct followup visits

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Phase 3 – Review and Revise Teaching

- Review the institutional plan of action
- Assess the methods and materials used
- Measure the outcome of the plan
- Revise the institutional plan of action
- Conduct review and revision visits
- Review and revise the national plan of action

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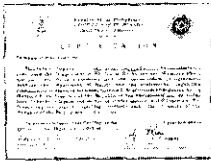
Phase 4 – Evaluate Teaching

- Process evaluation: describe and identify the changes made to the teaching/learning process; identify ways to improve it
- Outcome evaluation: assess student competence at the end of the academic year; their knowledge, skills, and attitudes; their ability to apply their knowledge, skills, and attitudes on the job after graduation
- Evaluation of the effectiveness of teaching: assess the ability of students to apply their knowledge, skills, and attitudes on the job after graduation

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Trained Faculty Still in Place and Teaching

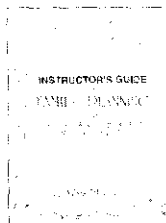
- Faculty assignments take into account faculty training and experience
 - All schools have at least one fulltime FP/RH faculty
 - 75% of faculty respondents received training through the TRH Project
 - Clinical faculty obtained government accreditation as FP/RH service providers



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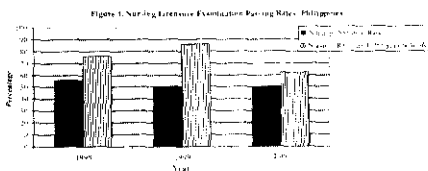
Competency-Based Teaching Methods *(continues)*

- 94% of nursing and midwifery students said:
 - they were assessed as competent in FP/RH skills at end of clinical rotation
 - checklists were used for RH/FP skills assessments
 - they had access to anatomic models
- 80% of students said they had sufficient opportunities to do FP/RH procedures and counseling during the clinical rotation



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Graduates From Strengthened Schools Performed Better on Licensure Examinations: Data from 4 Program Schools



total graduates from 4 schools:
 1998: 17161 and 219 graduates
 1999: 13152 and 214 graduates
 2000: 9271 and 128 graduates

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How Do We Know it Works? Turkey



Critical Components and Sustainable Results

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Preservice Midwifery Program: Background

- JHPIEGO first worked with medical schools and national inservice training systems in Turkey – 1992-1998
- In 1998-2001, those efforts led to
 - upgrading midwifery training from vocational level to university level (19 of 27 university-based midwifery schools)
 - And focused on three critical components
 - Training midwifery faculty and clinical preceptors (2-site)
 - Linking classroom and clinical sites
 - Follow-up and support

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Key Results

- By using the same clinical practices sites, one set of trainers meets both inservice and preservice training needs
- A national-level system is functioning to certify midwifery students to provide RH FP services as part of their preservice education
 - At end of academic year, students are assessed with checklists on key RH FP skills for certification

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Key Results (continued)

- Where are graduates working? Telephone survey late 2001:
 - 68% of midwifery graduates are working specifically in RH jobs (i.e., providing FP on a regular basis)
 - Rest of graduates still doing RH
 - Pregnancy and delivery care, postpartum FP counseling
- Evidence from project evaluation report (1998-99) on cost savings
 - Suggests that preservice training is 30% less expensive than providing the same training for midwives through in-service courses.

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Evidence of Effect of Preservice Strengthening Efforts on Service Delivery - Turkey

Number of Clinics Meeting FP Standards

Year	Number of Clinics Meeting FP Standards
1998	~2.5
2000	~4.5

Year

Results from the Istanbul FP Clinic Survey, 1998 and 2000 (MSH, May 2001) which includes clinics where JHPIEGO strengthening efforts were focused.

- Plastic bucket for chlorine solution
- Labeled LUB kits kept sterile
- Medical waste disposal in new, proof containers with lids
- Appropriate containers and available for sharps disposal

How do we know it works? Ghana

- In 1998, JHPIEGO began implementing the preservice strengthening process for FP and MNH in 2 of Ghana's 12 midwifery schools
- Since then, the process was rolled out to include all 12 schools
- In May 2002, a level 3 evaluation using a case-control study of midwives 1 year after graduation was conducted
 - Compared FP and MNH knowledge/skills of 72 midwives who graduated in 2000 from JHPIEGO-assisted schools with those of 70 midwives who graduated from schools that were yet not part of the program in 2000

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Ghana – Key Results

- Experimental group had significantly higher scores for knowledge
 - On specific components: Antenatal, childbirth care, partograph, postpartum hemorrhage, family planning, infection prevention, STD, HIV/AIDS
 - Significant difference between the two groups on the Total Knowledge score, summed across all components

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Ghana – Key Results

Experimental group had statistically significant higher scores for the following clinical skills:

- Counseling on family planning methods
- Handwashing
- Abdominal palpation
- Controlled cord traction
- Preparation of decontamination solution
- Instrument cleaning

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Lesson Learned #1

Strengthen linkages between schools and clinical sites

- Train teachers and preceptors together (Kenya, Ghana, Uganda, everywhere!)
- Establish system of regular communication
- Develop mechanism for tracking skill development

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Lesson Learned #2

- Foster rational use of limited preservice time
 - Identify skills that will be used by all and/or in a wide number of settings and focus on their development (e.g. examination skills, infection prevention, counseling)
 - Kenya – dropped IUD insertion, kept IUD counseling
 - Consider deployment issues

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Lesson Learned #3

- Provide support and followup to the schools as they implement the strengthened curriculum
 - Improves skills through feedback
 - Solves problems "on the spot"
 - Fosters a positive teaching/working environment
 - Motivates the teachers and preceptors
 - Facilitates full implementation and fosters integration into existing curriculum
 - Links the schools together in a network for support and assistance

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Lesson Learned #4

- Take advantage of synergies between preservice and inservice systems
 - There can be an overlap in the clinical practice sites used by both systems
 - Clinical trainers can also serve as clinical preceptors
 - Preservice can adapt inservice training packages
 - Coordination between the systems is needed
 - Standardizes content and teaching methodologies between the systems

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Lesson Learned #5

- The greatest impact is achieved through using a staged approach
 - Many countries have multiple preservice education institutions
 - Focus initially on a small number of schools (2-6, determined by resources available)
 - After the first year of implementing the strengthened curriculum, make needed revisions and expand into additional schools
 - When there are a large number of schools, several expansion stages may be required to incorporate them all

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Lesson Learned #6



- A learning package helps ensure standardized transfer of training from teacher or preceptor to student
 - Provides all material needed for CBT
 - Focuses on team approach and self-directed learning by students
 - Links classroom and clinical portions of curriculum

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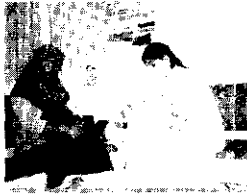
Lesson Learned #7

- Adapt existing curricula and materials whenever possible, don't start over each time!
 - Generic or standard curricula
 - Strengthened curricula from other countries
 - On-the-job courses
 - Inservice training packages

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Lesson Learned #8

- Focus on the *content area or area of the curriculum where the greatest impact is possible*
 - Process, once learned, can then be used locally to strengthen additional content areas
 - Internship year



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Lesson Learned #9

- Identify a "champion" within the system to lead the way
 - Need buy-in and leadership from the preservice institutions (the schools and certifying bodies/associations)
 - Medical schools in particular
 - Can also play a key role in mobilization and leverage of funding, especially from local sources

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Mary's Story Revisited...

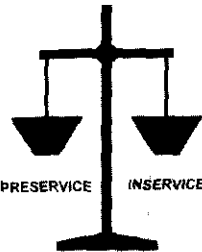
If we strengthen preservice education AND establish linkages between preservice and inservice

THEN

When Mary's daughter decides to go into midwifery, she will:

- graduate with the confidence and skills to provide basic services to her clients
- attend focused inservice training courses to upgrade and refresh her skills

Appropriate Balance of Preservice and Inservice



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Cost and Results Analysis (CRA) to Support Selection and Evaluation of Training Approaches in Africa

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- A. Highlights of presentation
- B. Case study: Ghabraza (for discussion at conference)

A. Highlights of presentation on *Costs & Results Analysis (CRA) to Support Selection and Evaluation of Training Approaches in Africa*

Linking Cost and Results

The term “cost-effectiveness analysis” is often used generically when speaking of the analysis of costs and results of activities. Four specific methods of Cost & Results Analysis are: (1) *Cost-benefit analysis*, (2) *cost-effectiveness analysis*, (3) *cost-utility analysis* and (4) *return on investment*. These terms all have a specific meaning and, therefore, the terms should not be used interchangeably. The four specific methods are briefly discussed here. The generic term, Cost & Results Analysis (CRA), can be used in place of the specific names of the four techniques.

The *Cost-Benefit Analysis (CBA)* methodology shown in PRIME II’s *PI: Stages, Steps and Tools*, is presented first as a point of reference. This methodology is a simple tool designed to aid in prioritizing interventions. It consists of a table with the following columns:

- Intervention
- Cost: a group rating from 1-10 on the financial, technical and political cost of implementing the intervention
- Benefit: a group rating from 1-10 of the benefit of the intervention, i.e., how well it would close the performance gap
- CBA ratio: a simple arithmetic expression of the benefit, divided by the cost. (The higher the outcome, the better – the perfect situation would have high benefit with very low cost.)

In this approach informed stakeholders provide their views not only on the financial costs and benefits of interventions, but also the technical and political “cost” and feasibility of the interventions. These non-financial factors are important to consider.

The table below illustrates the application of the current PRIME II CBA methodology. In this example, “Feedback from clients to providers” is highlighted as the intervention with the highest benefit cost ratio.

PRIME II's Cost-Benefit Analysis Tool (current)			
Intervention	Cost	Benefit	Ratio
Training	7	10	1.45
Recognition for treating clients humanistically (non-monetary)	4	8	2
Dissemination of the expectation of providers for how to treat	4	9	2.25
Development and dissemination of norms for how to treat	4	10	2.5
Feedback from clients to providers	2	8	4
Feedback from supervisors to providers	3	8	2.67
Revision of schedules to match # of clients with # of providers	3	6	2

Source: *PI: Stages, Steps and Tools*, 2000.

While the method shown above is relatively easy to apply, its subjectivity could be a disadvantage. More rigorous costing and results estimates may be indicated where feasible, especially when larger policy or program options with greater resource implications are being considered. This is not to say that the more subjective (e.g., technical and political feasibility) factors should not be considered, because they definitely should. Rather, the point is to increase the objectivity of the financial cost portion of the analysis where indicated.

(1) Cost-benefit analysis (CBA) In *CBA*, neither the cost nor the benefit variable are fixed, and the benefit variable (denominator) is expressed in monetary terms. *CBA* thus compares the monetary cost and monetary benefit of alternatives, typically in the form of a benefits-to-costs ratio. *CBA* is often used in describing analyses that would more correctly be classified as cost-effectiveness analysis (*CEA*) or cost-utility analysis (*CUA*) -- see definitions and examples for these terms below. Put simply, a *CBA* would aid in deciding whether a particular activity is worth doing at all, i.e., whether the cost of the activity is at least offset by its savings or financial gain. For example, if a performance improvement activity had benefits of \$60,000 and costs of \$20,000, the *CBA* or benefit-to-cost ratio (*BCR*) would be as follows:

$$\text{BCR} = \frac{\text{program benefits}}{\text{program costs}} = \frac{\$60,000}{\$20,000} = 3, \text{ or } 3 \text{ to } 1$$

In this example, the net benefits of the activity are \$40,000 (\$60,000-\$20,000). This same example will be used to illustrate return on investment (*ROI*) below.

(2) Cost-effectiveness analysis (CEA) *CEA* is applied to determine the costs and effectiveness of alternative ways of achieving the same objective. A cost-effectiveness ratio is expressed as cost divided by unit of effectiveness for each alternative intervention. The result or effectiveness value is not expressed in monetary terms, rather in units of results. An example from child health might be "cost per fully immunized child."

CEA can help to identify the most efficient way of achieving a specific objective. *CEA* gives guidance on how to use funds most efficiently where a specified output (or "desired performance" in *PI* terms) must be achieved. For example, if a ministry of health wants to know which of two training and learner support approaches will contribute the most to improved provider performance, they can test the two approaches and collect cost and results data. Approach A costs \$50,000 and results in

50 providers performing to standard one year later. Approach B also costs \$50,000, but results in only 40 providers performing to standard one year later. The CEA for each approach would be as follows:

$$\text{CEA for Approach A} = \frac{\text{program costs}}{\text{units of results}} = \frac{\$50,000}{50} = \$1,000 \text{ per provider}$$

$$\text{CEA for Approach B} = \frac{\text{program costs}}{\text{units of results}} = \frac{\$50,000}{40} = \$1,250 \text{ per provider}$$

The CEA shows Approach A to be the more efficient, costing \$250 less than Approach B for each provider performing to standard. Approaches A and B could also be assessed prospectively in the context of application of the PI approach. To do this would require analyzing the estimated rather than actual costs of each approach, along with the estimated results.

A Cost-Effectiveness Analysis of PI Approaches in Indonesia

Operations research results from the Quality Assurance Project demonstrate the cost effectiveness of alternative approaches for improving client-provider interaction (CPI) among clinic-based FP service providers in Indonesia. The study compares the cost-effectiveness of combinations of training; training + self-assessment; and, training + self-assessment + peer review to improve performance. It measures direct and opportunity costs to providers for the combinations of interventions and uses average number of utterances per counseling session at baseline and follow-up as the primary impact indicator, with analysis also of the type and quality of utterance. The cost and effectiveness data are combined to give a cost effectiveness ratio for the percent gain in utterances per dollar cost. This result is provided for two categories of utterance, facilitative communication and provision of medical and family planning information.

(Kim, Putjuk, Kois and Basuki, 2000)

(3) Cost-utility analysis (CUA) CUA compares the cost of alternatives with the subjectively determined ratings (benefits or effectiveness) of those alternatives. CUA may be used when effectiveness cannot be objectively measured due to lack of data, lack of resources for special studies, or other factors such as time constraints. An alternative form of CUA applies the concepts of Disability Adjusted Life Years (DALYs) or Quality Adjusted Life Years (QALYs), developed by the World Bank and others in early-to-mid-1990s, in attempting to provide more objective denominators for CUA, particularly for sector-level analysis and policy support. DALYs and QALYs apply population-based formulas to estimate years-of-life-saved, with weighting for quality-of-life factors such as disability, in measuring the impact of alternative health interventions.

(4) Return on investment (ROI) ROI is similar to a benefit-to-cost ratio, where both benefits and costs are shown as monetary values, except that ROI is expressed as a percentage. Using the example where program benefits are \$60,000 and program costs are \$20,000, ROI is calculated as follows:

$$\text{ROI (\%)} = \frac{\text{net program benefits}}{\text{program costs}} \times 100 = \frac{\$60,000 - \$20,000}{\$20,000} \times 100 = \frac{2}{1} \times 100 = 200\%$$

Note: net program benefits = program benefits – program costs

The example shows that the activity being evaluated has a 200% return on investment.

These examples of CRA techniques illustrate some of the ways in which cost and results/programmatic data can be combined for comparison using ratios and other decision support tools.

Such ratios should be part of a narrative report that discusses the numbers in the ratios, the strengths and weaknesses of the data and the implications of the results for decisions being considered. The narrative report should also include discussion of political, social or institutional capacity factors that are more difficult to quantify than cost data, but which could affect the feasibility of options.

This summary was designed to familiarize you with methods and tools for conducting a Cost & Results Analysis, with the focus being on the cost part of that equation. At the same time, it is necessary to point out that there is no “one way” of conducting a CRA. The selection and adaptation of tools will have to be highly specific to the situation.

Though there are challenges to obtaining reliable cost figures for international RH activities, the cost elements may be relatively easier to define and measure than results. This is especially true when one is talking about improving provider performance. Improved provider performance is defined in terms of increased capacity (e.g., new skills acquired and put into practice) or productivity (e.g., numbers of services provided) and in terms of the quality of the services provided. Quality of service can be defined in terms of compliance with protocols in delivering services, client satisfaction and perhaps by other means.

To obtain the best CRA results, PI and costing personnel should coordinate closely with monitoring and evaluation specialists to review planned indicators and data sources, and to review and interpret results.

Definition and Data Issues

A key constraint in costing alternative training and PI approaches in international settings is the quantity and quality of cost- and results-related information. Instruments and checklists may be used to assess the availability of financial information for conducting cost analyses, and for defining and measuring results.

PRIME II's CRA strategy and tools consider “life cycle” costs, including financial and opportunity costs to providers and clients where relevant, to ensure that PI

interventions are sustainable. "Life cycle" cost refers to the costs likely to be incurred as part of implementing the activity and over the full period of the activity. Omission of "life cycle" costs can lead to underestimation of costs and distort the results of a cost-effectiveness analysis.

Decisions must be made on a case-by-case basis about whether to include capital costs, i.e., purchase of equipment, and how to measure and allocate personnel costs for a costing or cost effectiveness study (Dmytraczenko, Levin, et al. 1999). In measuring personnel time and associated costs, direct observation is generally preferable to provider recall as a data collection method. In cases where there is unused capacity of facilities, equipment and or personnel, a study may choose to focus only on incremental costs of interventions being compared. This is based on the rationale that the unused capacity costs are already incurred or "sunk" costs. Omitting the "sunk" costs of unused capacity would not be appropriate in a situation where elimination or conversion to alternative use of the unused capacity resources is being considered. The reason omission of "sunk" costs would not be appropriate in this situation is that a decision to eliminate or convert unused capacity resources essentially changes those resources from being considered a "sunk" cost.

Costs of technical support will generally not be considered in such analyses, as these inputs are donor-supported, time-limited and not sustainable by host countries. This is not to say that other factors related to the need for and cost of technical support should not be considered, simply that considering the *cost* of international technical support may not be useful to counterparts in informing decisions, even though its *availability* is valuable or necessary. An alternative might be to make budgetary allowance for a transition from international to local technical support.

A critical step in any cost effectiveness analysis is the preparation of a checklist(s) of data to be collected and the sources from which it should be obtained. Definitions, instruments and methods need to be feasible and compatible with counterpart institution capacities and systems, and with technical assistance capacities and resources. Considerable care must be taken in adapting international models, so that local conditions, practices and data are taken into account.

B. Case Study: Ghabraza (for discussion in groups)

Training for Safe Motherhood Clinical Skills: A Comparison of Self-Paced Learning (SPL) and Traditional Classroom-Based (TBC) Approaches

The Ghabraza MOH is committed to scaling-up post-abortion care/life saving skills/family planning (PAC/LSS/FP) services as part of the National Safe Motherhood Program. It wants to reduce high levels of maternal and neonatal mortality and morbidity. After conducting performance needs assessments of both trainers and frontline service providers, the MOH selected a mix of training and non-training interventions designed to improve services. One of these interventions was to upgrade the skills of rural midwives for delivery of Safe Motherhood services through a traditional classroom-based training approach, which lasted three weeks. After two cycles of training the MOH evaluated the results and found that only half of the trainees reached the 80% cutoff for Safe Motherhood knowledge and skills, with an average combined score of 65%. The results were measured through a combination of a post-test immediately after the training and an assessment of knowledge, skills and clinical practices six months post-training.

Based on the results of the traditional training, the MOH and its partners developed an alternative approach for conducting Safe Motherhood training for midwives, which they called self-paced learning (SPL). They prepared a research design whereby the costs and results of the SPL and traditional training approaches were compared in two regions of Ghabraza, East and West, with 40 learners in each region. Each region had 20 learners trained through the SPL approach and 20 trained through the traditional classroom-based approach.

The sets of bullet points below summarize the factors behind the decision to try an alternative approach, the characteristics of the SPL approach, the results comparing baseline and endline data from both regions and both learning approaches, and some factors for consideration in assessing the costs and results of the two approaches. This is then followed by instructions for small group discussions and then by a table that summarizes the programmatic results and cost results of the operations research.

Decision to use an alternative learning approach

- Several key lessons learned about training providers through the traditional classroom approach:
 - **Trainees (midwives) are away from facilities at least 3 weeks at one time for traditional training, restricting access to services**
 - Many trainees were not able to complete their practical training due to a combination of low caseloads of appropriate clients/patients and the existence of at least eight trainees in the training sites at one time.
- SPL approach builds upon lessons learned from a three-week residential Safe Motherhood course being used.
- Applies principles of learning theory and instructional design practice to ensure that service providers acquire needed knowledge and develop the clinical skills.
- Also applies experience with alternative designs for LSS, experience with alternative training approaches (self-directed learning and distance learning) and other relevant experiences.

SPL approach highlights

The Safe Motherhood SPL approach combines

- Self-directed learning: print-based modules; effective facilitation and a strong learner support system, including learning teams
 - Opportunities for learners to practice, receive feedback, and become competent in Safe Motherhood clinical skills
 - Follow up and supportive supervision by the Regional Resource Teams (RRTs), who are also the trainers, to ensure providers' application and retention of skills on the job.
- SPL learner support system pairs learners according to geographic proximity and anticipated ability to work well together.
 - Learners work individually and then come together per an agreed upon schedule to study, discuss, solve problems, role play, and generally encourage each other's progress.
 - SPL is designed to take approximately 6-9 months to complete, per learner.

The SPL learning materials and learning cycle

- SPL materials reflect content being used in the ongoing three-week classroom course.
- Learners are oriented to approach and materials and work through the first unit, called the Foundations Unit, in a group-based learning session.
- Learners study subsequent units of the total of six on their own, and complete self-assessments and exercises.
- Learners meet with their partners, do role plays and other learning activities and work collaboratively to help each other resolve any learning challenges encountered.
- Learners participate in supervised clinical practice at a regional hospital, including assessment of learner competence via clinical checklists and a post-unit test.
- Learning cycle starts again as learners then begin a new unit. This cycle continues until all units and related clinical practices are completed.

Other points to consider

- Although the alternative approach (SPL) does not take learners away from their posts for a continuous three week period, the total duration and time away from post are slightly higher for the SPL than for the three-week classroom course. This is due to the rigor of the design to ensure learning and skill development.
- Costs are slightly higher for SPL than for the three-week classroom course. These characteristics of the SPL approach, that the cumulative time away from post and cost may be slightly higher than the three-week approach, go against typical thinking on alternative approaches, which is that alternative approaches would be shorter and less expensive. While duration and cost are key factors in assessing sustainability, it is interesting that both the MOH and USAID did not have major reservations as long as the SPL approach succeeds in its results or impacts.
- When one focuses on the results produced (competent learners), the unit cost per successful learner may still be less and the eventual volumes of desired services may expand more quickly through applying the alternative (SPL) approach.

- The self study part of the self-paced learning approach can be done by learners either during non-busy work hours or on other personal time if needed. It is flexible enough to be done in such a way as to limit the impact on service delivery.
- Baseline and end-line look at provider knowledge and skills, volumes of priority Safe Motherhood Services and client satisfaction, among other things
- Cost factors measured include direct costs of training, for learners and facilitators, including classroom, demonstrations, clinical practice and work in pairs.
- Instruments track time of learners, and monitor time of facilitators, resource persons and supervisors through budget plans and interviews.
- Estimated opportunity costs based on service volumes identified at baseline and provider interviews. Providers will offer some new services based on the training.

Instructions for Small Group Discussion

Please form small groups of no more than 4-6 and analyze the information provided. Select a facilitator and a rapporteur.

After reading the case study, including the costs and programmatic results data, discuss and formulate group responses to the questions below. Record your responses on a flip chart and be prepared to report back to the larger group.

QUESTIONS:


1. Which training option, self-paced learning (SPL) or the traditional classroom-based approach (TBC) seems to provide the most potential to improve service delivery? Why?
2. Which option seems to provide the best value for money? Why?
3. Which form of Cost & Results Analysis (CBA, CEA, CUA or ROI) may be most useful for helping to analyze this set of data? Why?
4. Did you choose the same option in response to questions 1 and 2?
5. What additional information might you want to have for decision-making?

Ghabraza MOH
Operations Research - Programmatic Results

Evaluation Component	Component Description	Self-Paced Learning (SPL) Approach			Traditional Classroom-based (TCB) Approach		
		East	West	Average Score - SPL	East	West	Average Score - TCB
Number of Learners		20	20		20	20	
Knowledge and Skills	Avg. score on post-test and after six months (combined)	88	88	84	79	77	73
Volume of Priority Services	Avg. # of priority services delivered six months post-training	152	163	158	154	148	151
Client Satisfaction	Avg. score based on client exit interviews related to priority services during six month period	84%	87%	86%	80	72%	77%


**Ghabraza Safe Motherhood Programme
Operations Research - Cost Results**

Costs of SPL and Traditional Classroom-based (TCB) Approaches								
SPL Approach								
	Unit	Batch 1- East	Batch 2- East	Total- East	Batch 1- West	Batch 2- West	Total- West	TOTAL
1	Foundations	22,719	22,654	45,373	23,650	23,668	47,318	92,691
2	Antenatal Care	14,025	13,958	27,983	10,885	10,926	21,811	49,794
3	Normal Labor & Delivery	19,785	19,785	39,570	16,745	16,786	33,531	73,101
4	Complications in Labor	19,785	19,718	39,503	16,745	16,786	33,531	73,034
5	Post-abortion Care	30,805	30,805	61,610	27,465	27,506	54,971	116,581
6	Postnatal & Newborn Care	14,025	13,958	27,983	10,885	10,926	21,811	49,794
	Additional Trips	3,800	3,800	7,600	3,460	3,460	6,920	14,520
	Subtotal	124,944	124,678	249,622	109,835	110,058	219,893	469,515
	Pre-Foundations Unit Facilitator's Meeting (1/region)	5,157		5,157	5,742		5,742	11,900
	Administration and Management	40,171		40,171	40,171		40,171	79,943
	TOTAL for SPL			294,951			265,807	560,758
							Total cost for SPL (\$)	\$112,151
							Cost per SPL learner (\$)	\$2,803
Traditional Classroom-based Approach								
	Batches 1 and 2, East and West	Batch 1- East	Batch 2- East	Total- East	Batch 1- West	Batch 2- West	Total- West	TOTAL
		33,700	33,700	67,400	36,380	36,380	72,760	140,160
	Batches 3 and 4, East and West	Batch 3- East	Batch 4- East	Total- East	Batch 3- West	Batch 4- West	Total- West	TOTAL
		33,700	33,700	67,400	36,380	36,380	72,760	140,160
	Subtotal	67,400	67,400	134,800	72,760	72,760	145,520	280,320
	Administration and Management	40,171		40,171	40,171		40,171	80,342
	PAC practicum – Batches 1 and 2	15,502	15,502	31,004	16,734	16,734	33,469	64,473
	PAC practicum – Batches 3 and 4	15,502	15,502	31,004	16,734	16,734	33,469	64,473
	TOTAL for TBC							489,608
							Total cost for Classroom-based (\$)	\$97,921
							Cost per Classroom-based learner (\$)	\$2,448



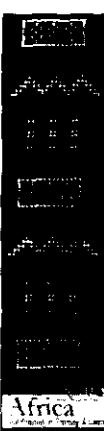
**Cost & Results Analysis (CRA)
to Support Selection and Evaluation
of Training Approaches in Africa**

Richard Njiru, CRABE, USAID/USAID
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Learning Objectives

- After this session, participants will be able to:
 - Define CRA and describe why it is useful
 - List factors to consider in conducting a CRA
 - Explain the relevance of CRA to their work
 - Tell how CRA methods can be applied based on a case study




Agenda

- Presentation/Q&A 25 min
 - What is CRA and why do it?
 - CRA work in progress
 - How does one apply CRA?
 - CRA issues to consider
- Introduction to case study 5 min
- Group activity 30 min
- Group reports & discussion 30 min
- Wrap-up




What is CRA? Why do it?

- Methods encompassed by CRA
 - Cost-Utility Analysis (CUA)
 - Return on Investment (ROI)
 - Cost-Benefit Analysis (CBA)
 - Cost-Effectiveness Analysis (CEA)
- Accountability and sustainability
- Training and Performance Improvement (PI) context



Cost-Utility Analysis


- *Definition:* Compares costs of alternatives with subjective (difficult to measure) ratings of benefits/effectiveness
- *Example:* Cost to achieve sector-level, population-based indicators such as DALYs or QALYS



Return on Investment

- *Definition:* Benefits and costs shown as monetary values as in BCR, except ROI shown as %
- *Example:*


$$\begin{aligned}
 \text{ROI} &= \frac{\text{Benefit} - \text{Cost}}{\text{Cost}} \times 100 \\
 &= \frac{200 - 0}{100} \times 100 \\
 &= 200\%
 \end{aligned}$$



Cost-Benefit Analysis

- *Definition:* Both cost (numerator) and benefit variable (denominator) expressed in monetary terms
- *Example:* benefit-to-cost ratio


BCR = $\frac{\text{Benefit}}{\text{Cost}}$ = $\frac{3000}{1000}$ = 3; or 3 to 1



Cost-Effectiveness Analysis


- *Definition:* Cost divided by unit of effectiveness to compare alternative approaches
- *Example:*

CEA = $\frac{\text{Cost}}{\text{Unit}}$ = $\frac{1000}{1}$ = \$1000/unit




Selected CRA Work in Africa

- Ghana Safe Motherhood alternative learning approaches
- Rwanda health facilities costing
- Kenya PAC peer support
- Essential Learning Methodology
- Tanzania zonal training centers




How Does One Apply CRA?

- Costing
 - Budgeting and expense tracking
 - Costing tools available
 - Must customize and adapt
- Results
 - Integrate with other M&E or special study



Costing

- Resources available for costing
- Types of costs
- What to include/exclude
- Period covered, data sources
- Estimated or actual costs
- Tracking labor (80/20 rule)
- Indirect costs



Results

- Key indicators and targets
- Synchronize cost and results data
- Instruments and procedures
- Linking cost and results data

An Assessment of Implementation of Action Plans Developed by Trainees

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Centre for African Family Studies (CAFS)

**An Assessment of Implementation of Action Plans
Developed by Trainees**

**Presented by the Centre for African Family Studies (CAFS)
at the JHPIEGO Conference: Training in Africa: Best Practices, Lessons Learned and
Future Directions**

18- 20 August, 2003

Lusaka, Zambia

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INTRODUCTION

The Centre for African Family Studies (CAFS) is an African institution whose mission is to strengthen the capacities of organisations and individuals working in the field of reproductive health, population and development in order to contribute to improving the quality of life of families in sub-Saharan Africa.

To achieve its mission, CAFS conducts courses and provides research and consultancy services from strategically located bases in East and West Africa, with headquarters in Nairobi, Kenya and a regional office in Lomé, Togo.

CAFS offers training programmes that are tailored to specific and unique needs of its clients. The training programmes in the area of Reproductive Health and HIV/AIDS focus on Advocacy, Information, Education and Communication (IEC) Behaviour Change Communication (BCC), Gender and Empowerment, Management, Leadership, Youth and Population and Development. More than 3000 participants attended CAFS' courses between the year 2000 and 2002.

As part of its efforts to improve the quality of the training offered, CAFS developed a participant follow-up system. In 1989/90 CAFS introduced a system of follow-up of past participants, which involved sending a simple questionnaire on the use of skills after the course. The responses from this exercise were few and it prompted CAFS to come up with a different way of participant follow-up.

In 1995 CAFS started a system of conducting surveys every two years on former participants through visits in their respective countries. This system provided useful information on how participants utilised the knowledge and skills gained from CAFS courses. However, this approach was found to be very expensive.

In the last three years, CAFS has developed a new follow-up system aimed at:

- ❖ Assessing utilisation of knowledge and skills gained from the course
- ❖ Assessing gaps and weaknesses in training
- ❖ Assessing emerging training needs
- ❖ Collecting information on the type of assistance participants require from CAFS in order to allow them to better utilise the skills gained from the course.

The main goal of the participant follow-up system is to assess whether the participants are utilising the knowledge and skills acquired during the course. In particular, the assessment seeks to establish the extent to which action plans developed by the participants during the course have been implemented and the constraints faced. This assessment also aims at identifying weaknesses in training, emerging needs and additional support that can be provided by CAFS.

This paper is divided into four sections. Section 1 contains a description of the follow-up system. Section 2 contains a description of the tools and Section 3 contains the findings from the pre-test. In Section 4 the lessons learned are presented.

SECTION 1. DESCRIPTION OF CAFS' FOLLOW-UP SYSTEM

To achieve the objectives of the follow-up system, CAFS has put in place the necessary structures that include establishment of country focal persons, tracking information on implementation of action plans, implementation of *follow-up of training*, follow-up activities for *in-country training*, *promoting contact between CAFS alumni and staff*, and establishing an alumni club.

1.1 Establishing Country Focal persons

In each country that has been identified as a priority, CAFS identifies and establishes a focal person using pre-determined criteria. The focal person should display potential for developing a network with the main organisations involved in Reproductive Health in the country. This may be someone with an already existing network and thus only requires to strengthen it and also refers to those who may not have such an established network but have the potential to create one. In addition, the focal person should display the ability and willingness to market CAFS training and technical assistance services to donors, government ministries, NGOs, the private sector and the civil society. The responsibilities of the focal person include identification of opportunities and marketing CAFS services in the country as well as following up participants who have participated in CAFS courses.

1.2 Tracking information on the implementation of participants' six-month action plans

CAFS has institutionalised a system such that for each course, participants develop individual action plans for initiatives to be undertaken *within the first six (6) months following the course. The course coordinator ensures that the proposed initiatives can be realistically undertaken within that period by the participant in his/her current position with minimal additional investment from the employer.*

The individual action plans follow a *standardised CAFS format which is concise and fits in a maximum of two pages. The action plans are in table format and include the following key components:*

- *Activities to be undertaken*
- *Techniques gained from the course that will be used*
- *Support and resources required*
- *Expected output (s)*
- *Timing/ dates*

During the course trainers facilitate a session for identifying the enabling and inhibiting factors that would affect the utilisation of the knowledge and skills acquired during the course and propose ways of addressing these factors. Once the action plans are completed they are shared with other participants. The objective of the sharing action plans session is to give an opportunity for peer review and obtain feedback on how the action plans can be improved.

This process also serves to establish a social contract between the participants and the trainers on the implementation of the action plans and to seek commitment for completing

the follow-up questionnaire to provide feedback to CAFS on the planned activities. The role of the CAFS focal person, as a liaison person between CAFS country manager and CAFS former participants, is also explained. Participants receive the contacts of the focal person in their country and are encouraged to link with him/her upon their return home. A standardised questionnaire is distributed and discussed during the session. The participants are expected to complete it and send it back to CAFS six months after the course.

The course coordinator officially sends out individual action plans to both donors and immediate supervisors of each participant with a covering letter requesting the supervisor to provide support to the participant in implementing the action plans. These action plans are sent to the supervisors who have signed the participants' application form within two weeks after the course. The action plans are sent together with two questionnaires: one to the supervisor and the other one to the participant.

The list of participants from a country, together with copies of action plans and questionnaires, are forwarded to the CAFS focal person within the same period. The completed questionnaires can either be sent through the focal person or directly to CAFS.

1.3 Training Follow-up Implementation

Two months after the course, the focal person contacts the former participants to establish linkage and sensitise them to share their experience in the CAFS course with their colleagues and friends. The focal person also encourages them to seek assistance from CAFS trainers in solving problems that may arise from applying the knowledge and skills acquired in the CAFS course. The focal person contacts former participants living in the same town by paying them a visit at their workplace or calling them on phone.

Five months after the course, the Programme Assistant who assisted the course, in collaboration with the country manager, sends a reminder to the focal persons for planning this activity in the coming month.

Six months after the course, the focal person again contacts the former participants to remind them to complete the follow-up questionnaire and return it, in a sealed envelope, so that the focal person can forward it to CAFS. The focal person provides a copy of the action plan and a follow-up questionnaire to participants who may have lost or misplaced the original documents.

The focal person sends all the completed follow-up questionnaires to the country manager. The latter reviews the questionnaires and passes them on to the Head of Technical Department for English speaking countries or to the Head of Lomé Regional Office for French speaking countries for computerised data processing.

A data entry mask has been developed for processing the data from completed follow-up questionnaires as they are received at CAFS. After processing the data, the programme assistants pass on the original questionnaires to the course coordinator for further analysis. This enables the course coordinator to undertake participant follow-up actions and to use the findings to identify gaps in the course and improve the quality of the course.

In the month of July every year, the Head of the Technical department (H/TD) and Head of the Lomé Regional Office (H/LRO) supervise programme assistants in analysing the data from the follow-up questionnaires for the training conducted the previous year. These findings on the follow-up are compiled into a report and the H/TD presents this consolidated report during the annual staff consultation in September. This report is circulated to CAFS major donors and stakeholders.

1.4 Follow-up Activities for In-country Training

CAFS trainers conduct a debriefing session for both the funding agency and the recipient organisation before leaving the country after an in-country training. Using the CAFS format, the debriefing report highlights the needs for coaching the new graduates to enable them to become fully competent in using the new skills. The debriefing highlights the skills, which require coaching services from the CAFS' trainer and their costs. CAFS ensures that training follow-up is budgeted for any bids for programme-based training.

1.5 Promoting Contact Between CAFS Graduates and CAFS Staff

In the month of December every year, the H/TD extracts from the Management Information System (MIS) databank the list of all participants who attended CAFS courses during the year per country with their contacts. This list is available on soft and hard copy. CAFS staff travelling to any country take with them the list of CAFS former participants from that country for the last three years.

CAFS staff visiting a country are encouraged to contact at least two former participants. CAFS recommends that staff make physical visits as opposed to telephone contacts. The CAFS country managers are requested to allocate time to this activity in the staff trip agenda. Feedback from the contacts with former CAFS participants is usually included in the trip report.

1.6 Establishing an Alumni Club

CAFS will develop an electronic Alumni Club for assisting its former participants to share experiences. It will be exclusive to past participants in CAFS' courses and selected "friends of CAFS". The privileges of the alumni members club will include: an alumni column in the CAFS news and CAFS Website; receiving CAFS news, giving comments and input on their experiences and documenting progress in both personal and professional areas; and a chat room that the alumni will have access to, and provide an opportunity to share experiences.

SECTION 2. DESCRIPTION OF THE TOOLS

The tools used for the follow-up system consist of two questionnaires, one for participants and one for their supervisors as well as a data analysis plan. The self-administered questionnaires seek information on various aspects of the training and implementation of action plans.

2.1 Participants' Questionnaire

The questionnaire for participants seeks information in the following broad areas: background information, expectations from the course, career progression, initiatives undertaken as a result of the course, gaps in training, emerging needs and general observations.

The first section on background information seeks to elicit details such as the name of the participant, contact address, name of current employer, position, title of course attended and the date.

The next section focuses on the expectations and asks the participant to reflect on the expectations they had when they applied for the course, and to list those expectations that were met by the course and those that were not.

The third section on career progression seeks to identify any changes that have taken place in their job responsibilities that can be attributed to the training. Participants are requested to list the job responsibilities they had before training and the additional responsibilities that they have been given after the training.

The section of the questionnaire on initiatives undertaken seeks to determine if the action plans developed during the course were implemented and the specific activities implemented. Information on barriers and constraints to implementing the action plan is sought as well as other initiatives undertaken that were not part of the action plan. Given the importance placed on sharing knowledge and skills gained with others, information on specific initiatives undertaken to share the knowledge, skills and experiences from the course with colleagues, is also sought.

The fifth section focuses on identifying gaps in training and requires the participants to reflect on the given objectives of the course and to list the relevant topics or subjects that were not covered by the course but are necessary for their current job responsibilities. In addition, the participants are requested to list any topics that they felt were not sufficiently covered during the training.

The section on emerging needs requires that participants reflect on their current job responsibilities and to list any additional knowledge and skills that they need in order to work more effectively in their current job.

The final section of the questionnaire seeks information on their general observations of the course. Information on how they rate the experience with CAFS and how they rate the performance of the CAFS trainers for the course attended. In addition, the participants are asked to indicate what assistance CAFS could provide to enable them utilise their knowledge and skills more effectively. Participants are also requested to indicate whether

they would recommend CAFS courses to colleagues and to state the specific course and cadre of colleagues from their organisation to whom they would recommend the course.

2.2 Supervisors' Questionnaire

The supervisor's questionnaire seeks information on the background information of the supervisors (such as name, address, organisation and position) information on the employee that attended CAFS course, and initiatives undertaken by the alumni. In the questionnaire, the supervisors are requested to indicate areas where performance has improved, any changes in job responsibilities that have occurred as a result of the training, additional training needs of participants and information on any additional assistance that could be provided by CAFS.

2.3 Data Analysis Plan

Information collected from the questionnaires is verified and entered into a computerised database. The data is categorised by type of respondent (supervisors and participants) and course attended. Descriptive analysis of the data is carried out according to the broad areas contained in the questionnaire.

SECTION 3. FINDINGS FROM THE PRE-TEST

A sample of participants was selected to participate in the pre-test of the follow-up system. The participants for this assessment were drawn from Ethiopia, Kenya, Uganda and Tanzania. As this is an ongoing exercise, the findings presented here are derived from questionnaires that were returned to CAFS between December 2002 and March 2003.

Out of the questionnaires received, 87% were from participants and 13% were from supervisors. The information obtained was mainly from participants who had attended the following regional courses: Management of Community Based Services in Reproductive Health Programmes, Advocacy for Reproductive Health, Promoting Gender in Reproductive Health and Rights and Managing Reproductive Health Programmes. In addition, some participants had attended the in-country Proposal Development Course for People Living with HIV and AIDS.

3.1 Expectations

Almost all the participants, 96%, reported that a reasonable number of their expectations of the course were met. Less than half of the participants, 44%, reported that they had expectations that were not met. More than half of the participants, 63%, reported that they had made progress in their careers that could be directly attributed to the training. It was interesting to find that 85% reported they have had additional responsibilities after the training.

3.2 Implementation of Action Plans

Approximately 70% of the participants reported that they implemented the action plans developed during the course. Initiatives undertaken by course participants ranged from training other staff, initiating income generating activities, improving time management within the organisation, reviewing existing management systems, organising workshops for

stakeholders and developing project proposals. Some participants indicated that services were expanded, facilitative supervision introduced and monitoring was improved and they were able to build better teams within their places of work.

3.3 Constraints in the implementation of Action Plans

The major constraints, faced by those who were not able to implement their action plans, were a lack of funds, logistical difficulties and changed job responsibilities. Some participants indicated that the planned activities needed to be in-built into the organisations' strategic plan for both implementation and allocation of funds.

3.4 Other initiatives outside the Action Plans

It was interesting to note that a high proportion (about 74%) implemented initiatives that were not part of the action plan. Initiatives undertaken that were not part of the action plan included training others, organising workshops, writing proposals, promoting gender responsive messages for youth, and networking. Several of the participants indicated that the proposals developed were funded and had resulted in expansion of the services and establishment of other branch offices.

3.5 Gaps identified

Some weaknesses were identified in the courses in terms of topics that the participants thought were not sufficiently covered and those not covered at all. Comparative analysis of the responses by course indicates that these weaknesses were very course specific.

For example, participants to the Proposal Development Course and Managing RH programmes course indicated that behaviour change communication was a topic that was not covered but is necessary for their current job responsibilities. Gender was another topic that participants from the proposal development course and the Managing RH programmes course reported was not covered but is necessary for their current job responsibilities.

Participants also specified topics they felt were not sufficiently covered by the course. Participants from the Gender course felt that the application of gender analysis tools to unique situations was insufficiently covered. In the Management of RH programmes course participants felt the topic on financial management was not adequately covered whereas in the Managing Community Based Health Services in RH course the participants felt the topic "Introduction to EPI Info" was not sufficiently covered and was necessary for their current job responsibilities. In the Proposal Development course one participant indicated that the topic on project outputs, outcomes and inputs was not sufficiently covered.

3.6 Emerging training needs

On reflecting on their currently job responsibilities, participants were able to list some emerging needs and additional knowledge and skills they required. The specific additional knowledge and skills participants felt they needed to be able to work more efficiently in their current jobs included using computers, information technology, communication, and

Behaviour Change Communication (BCC). Other important emerging needs were HIV and AIDS and project management.

Participants were requested to indicate the kind of assistance they expect CAFS to provide in order to enable them to better utilise the knowledge and skills acquired from the courses. On analysis of the responses three broad areas in which the participants would like additional assistance from CAFS can be discerned. These are further training to update skills, dissemination of updated materials on relevant topics and networking to facilitate sharing of information and experiences.

Almost all of the past participants have shown an interest to maintain and sustain communication with CAFS and with one another so that they can continue to share experiences and knowledge with each other. Suggestions on some of the ways this could be done were made and included creating list serves and an alumni association. The respondents also requested for assistance from CAFS in obtaining funding for the concept papers, action plans and proposals developed during the different courses. In addition, participants required assistance that was specific to the course attended. For example, in the proposal development course for people living with HIV and AIDS, additional assistance in developing strategies for sustainable transfer of knowledge and skills within the organisation was identified as a need.

3.7 General Observations

In general, 96% of the participants rated CAFS training as either very good or good with a similar percentage rating the performance of CAFS trainers as either very good or good. Almost all, 92%, indicated that they would recommend CAFS courses to their colleagues.

3.8 Findings from the supervisors' questionnaire

Analysis of the findings from the supervisor's questionnaire in general corroborated with that obtained from the participants. All the supervisors reported that the participants had undertaken initiatives or activities as a result of the training. In all the feedback received, all the supervisors reported that the performance of the participants had improved.

Approximately 75% of the supervisors reported that there had been a change in the employee's responsibilities since they attended the training, which was lower than the 85% reported by participants. The supervisors unanimously reported that there were other areas covered by the participant's job description that required performance improvement, which could be addressed by further training or technical assistance. As performance improvement is a continuous process, this was not surprising.

SECTION 4. LESSONS LEARNED

From the findings of the pre-test, CAFS has learnt several lessons, the most important of which are listed below.

Lesson 1

A number of participants were able to undertake initiatives outlined in the action plan while others were not able to due to lack of funds and logistical difficulties. This is an important lesson for CAFS in the sense that in giving the guidelines for action plans it is crucial for the trainers to stress that the proposed initiatives should be those that can be realistically undertaken within the period indicated by the participant in his/her current position with minimal additional investment from the employer.

Lesson 2

Most of the emerging needs identified by the participants are HIV and AIDS, Behaviour Change Communication, Gender and use of computers and information technology, which are covered by existing courses at CAFS. The finding that most of the emerging needs identified by the participants are covered by existing courses supports the relevance of CAFS courses.

Lesson 3

Almost all the former participants have shown an interest to maintain and sustain communication with CAFS and with one another so that they can continue to share experiences and knowledge with each other. That the participants have requested for establishment of a network and mechanisms for sharing information is an indication that the current system, as designed, is responding to real needs from the field.

ANNEX I: Participants' Questionnaire

1. PARTICIPANT INFORMATION

First Name _____ Last Name _____

_____ Sex _____

Name of Current Employer _____

P.O. Box _____ Town/City _____ Country _____

Telephone _____ Fax _____ Email _____

Current Job Title/Position _____

Name of Employer at time of the course _____

Title of Last CAFS Course Attended _____

Period of Course from / / / to / / /
Day Month Year Day Month Year

2. EXPECTATIONS FROM THE COURSE

(i) When you applied to attend CAFS course you had several expectations, please list your expectations (maximum of four) at the beginning of the course that were met:

	Expectations that were met
1	
2	
3	
4	

(ii) List your expectations (maximum of four) at the beginning of the course that were not met:

	Expectations that were not met
1	
2	
3	
4	

3. CAREER PROGRESSION

(i) Have any changes taken place in your job responsibilities since you attended the course that you can attribute to the training? ___Yes ___No

(ii) List the job responsibilities you had prior to the training and any new or additional responsibilities you have had since the training.

	Responsibilities prior to training	New/Additional Responsibilities after training
1		
2		
3		
4		

4. INITIATIVES UNDERTAKEN AS A RESULT OF THE COURSE

(i) During the course, you prepared an Action Plan to implement upon your return to your organisation. Have you implemented the Action Plan you developed during this course?
___Yes ___No

(ii) If your answer is "Yes" to the above question, list the activities you have implemented in the table below.

	Activities implemented in Action Plan
1	
2	
3	
4	

(iii) If your answer is "No" to the above question, list the reasons why you have not been able to implement the Action Plan in the table below.

	Barriers/constraints to implementing Action Plan
1	
2	
3	
4	

(iv) List any other activities or initiatives that were not part of the action plan, that you have undertaken using the knowledge and skills gained from the course.

Other activities/initiatives undertaken	
1	
2	
3	
4	

(v) Have you undertaken any initiatives to share your knowledge, skills and experience from the course with your colleagues? ___ Yes ___ No

(vi) If your answer is "Yes" to the above question, list the activities you have undertaken to share your knowledge, skills and experience with others.

Other activities/initiatives undertaken	
1	
2	
3	
4	

5. GAPS IN TRAINING

(i) Given the objectives of the course you attended, list relevant topics or subjects that were not covered by the course but are necessary for your current job responsibilities.

Topics/subjects not covered	
1	
2	
3	
4	

(ii) List the topics that were not sufficiently covered during the course.

Topics/subjects not sufficiently covered	
1	
2	
3	
4	

6. EMERGING NEEDS

Given your current job responsibilities, list any additional knowledge and skills that you require in order to work more efficiently in your current job.

Additional knowledge and skills required for current job	
1	
2	
3	
4	

7. GENERAL OBSERVATIONS

(i) In general, how would you rate your experience with CAFS' training?

Very Good Good Fair Poor

(ii) How do you rate the performance of CAFS' trainers for the specific course you attended?

Very Good Good Fair Poor

(iii) What assistance can CAFS provide to enable you to utilise your knowledge and skills better?

(iv) Would you recommend CAFS' courses to your colleagues? Yes No

(v) If your answer to the above question is "Yes", what are the different cadres in your organisation that you would recommend to attend CAFS courses?

	Course	Type of Cadres
1		
2		
3		
4		

8. Date questionnaire filled in / /
Day Month Year

Thank you for taking the time to complete this questionnaire.

ANNEX II: SUPERVISORS' QUESTIONNAIRE

BACKGROUND INFORMATION

Name of Supervisor:

First Name _____ Last Name _____ Sex _____

Name of Organisation _____

P.O. Box _____ Town/City _____ Country _____

Telephone _____ Fax _____ Email _____

Job Title/Position _____

Name of Employee that attended CAFS Course:

First Name _____ Last Name _____ Sex _____

Title of Course Attended by Employee _____

Period of Course from / / / / to / / / /
Day Month Year Day Month Year

1. (i) Has your employee undertaken any initiatives or activities as a result of CAFS training?
_____ Yes _____ No

(ii) If yes, please list the activities that your employee has initiated or undertaken as a result of CAFS training.

Activities undertaken	
1	
2	
3	
4	

2. (i) Has there been any improvement in the performance of the employee since he/she returned from the training?
 _____ Yes _____ No

(ii) If your answer to the above question is "Yes", please state the areas where performance has improved.

Areas where performance has improved	
1	
2	
3	
4	

- 3 (i) Have there been any change in his/her job responsibilities since the employee attended CAFS' training?
 _____ Yes _____ No

(ii) If your answer to the above question is "Yes", please state the changes and/or additional job responsibilities that have been assigned.

Changes in job responsibilities	
1	
2	
3	
4	

4. (i) Are there any areas of his/her job description which require some performance improvement that can be addressed by further training or technical assistance?
 _____ Yes _____ No

(ii) If your answer to the question above is "Yes", please list the areas where further training is needed:

Training needs of employee

1

2

3

4

5. (i) Are there any unmet needs for training or technical assistance in your organisation or programme that can be provided by CAFS?
_____ Yes _____ No

(ii) If your answer to the above question is "Yes", please list the unmet needs for training or technical assistance that can be provided by CAFS.

Training or technical assistance needs

1

2

3

4

6. Date questionnaire filled in /__/_/ /__/_/ /__/_/
 Day Month Year

Thank you for taking the time to complete this questionnaire.

**An Assessment of
Implementation of Action Plans
Developed by Trainees**

A Presentation by the
Centre for African Studies (CAFS)
at the
JHPIEGO Conference - Training in Africa:
Best Practices, Lessons Learned and
Future Directions

18-20 August 2003 Lusaka, Zambia

Session Objectives

By the end of the session, participants will:

- Learn about CAFS' system of participants follow-up
- Gain knowledge in assessing training impact
- Appreciate the importance of assessing training gaps and emerging needs from former trainees

ABOUT CAFS

Mission:

To strengthen the capacities of organisations and individuals working in the field of reproductive health, population and development in order to contribute to improving the quality of life of families in sub-Saharan Africa.

CAFS System for Participants' Follow-up

The CAFS system of participants' follow-up has two components:

- Follow-up on the implementation of action plans developed during the training
- Development of a network of CAFS alumni

Action plan follow up component

Objectives:

- To assess the quality of CAFS training
- To identify gaps in the training offered by CAFS
- To provide continuous training
- To assess the emerging training needs

Process of action plan follow up

- Establishment of country focal persons
- Development of action plans during the training
- Sharing the action plans with sponsors and supervisors
- Sending questionnaires for both participants and supervisors six months after the training

Process of action plan follow-up continued

- Collection of completed questionnaires by focal persons
- Entry of the data on a continuous basis into the database
- Analysing the data
- Production of a report
- Feedback to CAFS trainers and alumni and their supervisors

Process of action plan follow-up continued

The findings are used to :

- improve CAFS training
- develop new courses
- provide support to CAFS alumni

Tools for Action plan follow-up

- Questionnaires for course participants
- Questionnaires for supervisors
- Data Analysis Plan

Information collected

- **Expectations met**
- **Career progression**
- **Initiatives undertaken**
- **Gaps identified in the training;**
- **Emerging training needs**
- **Areas of performance improvement observed**
- **General Observations**

10

Preliminary findings on action plan follow-up

- **96% had their expectations fulfilled**
- **63% had made progress in their careers**
- **70% had implemented the action plans developed during the course**

11

Initiatives undertaken

- **Training other staff**
- **Income generating activities for their organisations**
- **Improving time management in the organisation**
- **Organising workshops**
- **Developing project proposals**

12

Initiatives outside the action plan

- **74% reported initiatives not in the action plan**
- **Initiatives included:**
 - Promoting gender
 - Networking
 - Writing proposals

Emerging needs identified

- Mainstreaming the following in all CAFS courses:**
- Behaviour change communication
 - Project management
 - Information Technology
 - HIV/AIDS
 - Research and evaluation

Development of Alumni Networks

Objectives:

- To promote self-learning and mutual support
- To share experiences
- To use the satisfied clientele to promote CAFS services and products

Strategies for development of alumni networks

- **Creation of a network for each course cohort**
- **Establishment of an electronic network for all CAFS alumni**
- **Facilitation of fora at the country level for sharing experiences and best practices**

Strategies for alumni network continued

- **Documenting best practices at the country level**
- **Encouraging dissemination of best practices through national presentations and sharing them electronically**

Status of network development

- **Networks for some specific course cohorts have been developed**
- **The overall network is being designed**
- **An association of alumni was created in Mali in June 2003**

Challenges in the follow-up system

- Responses to questionnaires by participants and supervisors
- Creating, managing and sustaining the alumni network

Lessons Learned

1. Action plans developed during the course should be such that they can be implemented with minimum resources
2. Findings confirm relevance of CAFS courses
3. The system as designed is responding to identified needs from the field.

Group Exercise

- (a) Based on your experience, what suggestions can you offer to strengthen this follow-up system?
- (b) What are some of the practical ways in which assessing training impact in Africa can contribute to the improvement of training processes?
- (c) What do you see as the main challenges in assessing training impact in Africa?

**Using Evaluation Results
to Improve Integrated Management of
Childhood Illnesses (IMCI)
Preservice Training Delivery**

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Using evaluation results to improve
Integrated Management of Childhood
Illnesses (IMCI) preservice training
delivery

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Curriculum background

- ◆ 4 year degree programme
- ◆ Register with professional council with 4 qualifications
 - general nursing
 - community health nursing
 - midwifery
 - psychiatric nursing

Curriculum background

- ◆ 1996 curriculum change to CBE & PBL
 - experiential learning takes place in community
 - student takes responsibility for own learning
 - contextualise learning material
 - theory and practice integration
 - problem solving and critical thinking
- ◆ Developed curriculum in collaboration with services and community

Curriculum background: content selection

◆ 1st year:

- Community development
- Family assessment & care
- Conditions commonly found in the community
e.g. hygiene related (dermatology and communicable diseases presenting with a skin lesion), environmental hygiene
- Upper and lower airway infection

Curriculum background: content selection

◆ 2nd Year: conditions found in PHC clinics e.g.

- Hypertension,
- HIV/AIDS, TB
- Anaemia
- GI e.g. diarrhoea, constipation, worm infestation
- DM,
- Contraception, STI
- Urinary tract infections

Curriculum background: content selection

◆ 3rd Year: conditions treated in hospital e.g.

- MI,
- PE,
- Fractures, replacement
- Renal failure,
- Neurology, neurosurgery

◆ 4th Year: *midwifery and psychiatry*

**Curriculum background
Experiential learning areas**

- ◆ 1st year: community based
- ◆ 2nd year: primary health care clinics
- ◆ 3rd year: hospital based care
- ◆ 4th year: psychiatric nursing and midwifery (community, PHC settings and hospital based)

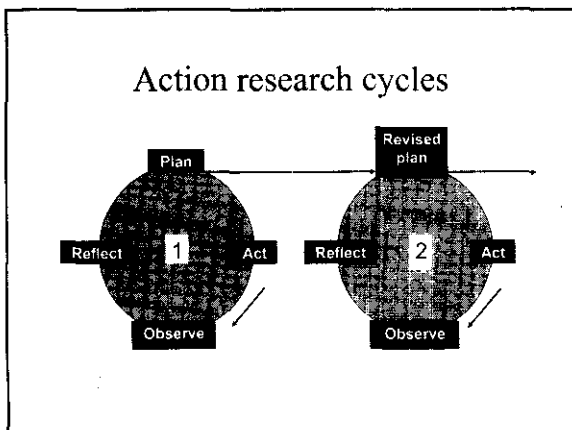
Curriculum background

- ◆ Experiential learning two (2) days week (08:00 - 16:00)
- ◆ Three (3) days per week class
- ◆ Inter-faculty teaching
- ◆ 2000 SANC requested IMCI incorporation
- ◆ 2001 School of Nursing incorporated IMCI

Discussion topics (15 min)

- ◆ What are the similarities or differences in the curriculum presented and yours?
- ◆ Are there any prerequisites for implementation of IMCI?
- ◆ What are the factors that hindered or facilitated the incorporation process?

Implementation process
Research and Educational Orientated



- Data gathering strategies**
- ◆ Formal weekly facilitators meetings
 - ◆ Engaged learning questionnaire
 - ◆ Informal discussions with students
 - ◆ Focus group interviews with students

Planning 1st cycle

- ◆ 2nd Year curriculum
- ◆ Train facilitators in IMCI
- ◆ Schedule at beginning of year to equip students so that they can cope in practice
- ◆ Use WHO-UNICEF material (hard copies)
- ◆ Approximate 11 weeks vs. 11 days
- ◆ IMCI as separate entity

Planning 1st cycle

- ◆ Immunization skill
 - Demonstration
 - Practice in simulation laboratory
 - Practice in PHC clinics
 - Assessment skill

Planning 1st cycle : Timetable

Mon	Tues 2:3 8:9	Wed	Thur	Fry 2:3
15:1	15:1	20:2	17:1	17:1
	Assessment fever & ear 96 <i>Injection</i> <i>VRP test 1</i>			Assessment: Mainutrition & anemia 117
25:1	25:1	27:2	28:1	28:1
	Assessment: immunization <i>Immunization</i>			Other problems 128

Planning 1st cycle :Assessment

- ◆ Feedback in class on paper cases done at home
- ◆ 2 written open book tests (Chart booklet)
Part of semester mark
- ◆ 50% of summative evaluation (Chart booklet)

Reflection: cycle 1

- ◆ Facilitators felt more comfortable to accompany students in clinical setting
- ◆ Students enjoyed it
- ◆ Students felt it is very appropriate because they could immediately apply it in their experiential learning
- ◆ Students thought it was very easy

Reflection: cycle 1

- ◆ Students/facilitator ratio 25-1 v/s 4-1
- ◆ Self study activities were not done
- ◆ Relied on clinic staff for accompaniment of students in clinics
- ◆ DoH was unsure whether they will be able to keep on supplying students with hard copies

Reflection: cycle 1

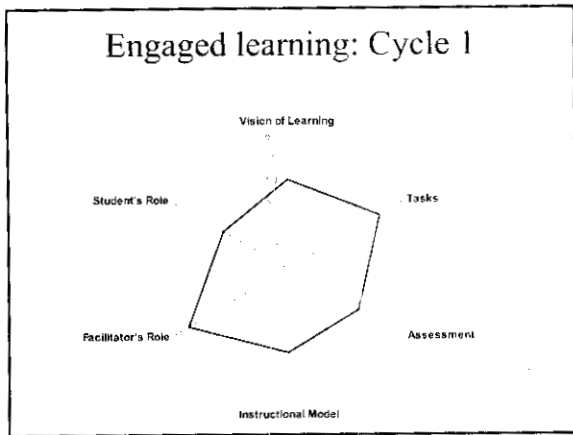
- ◆ Setting a paper could be tricky and needed thorough moderation
- ◆ Strong students became bored and wanted to move on faster
- ◆ Could integrate theoretical content into IMCI
- ◆ Immunization skill effective

Engaged learning

- ◆ Vision of learning:
 - responsible.
 - self regulated.
 - self evaluation.
 - energised.
 - lifelong
- ◆ Tasks:
 - challenging.
 - authentic and multidisciplinary
- ◆ Assessment:
 - authentic task, performance based

Engaged learning

- ◆ Instructional model:
 - Interactive
- ◆ Teacher roles:
 - facilitator, guide, learner
- ◆ Student role:
 - explorer.
 - observe and apply the thinking processes used by practitioners.



Planning: Cycle 2

- ◆ Start at beginning of year
- ◆ As the School of Nursing has a multi media centre with an instructional designer, computer mediated teaching was an option.
- ◆ Compulsory 1 day orientation period before university starts

Planning: cycle 2

- ◆ Advantages of computer mediated teaching were:
 - Student/facilitator ratio would improve
 - Each student must do all the case studies on computer, therefore everybody is forced to work
 - Reading material on computer
 - Print reading material or make copies from the library. Not dependent on DoH for copies.

Planning: cycle 2

- Students could work at their own pace.
- Computer access at home
- All students still received a chart booklet
- Off-line access using CD-Rom
- ◆ Better integration into 2nd year content
- ◆ Theoretical assessment remained the same

Planning: cycle 2

- Observe or witness management of 5 IMCI cases in PHC clinic
- Record them in the workbook and have it signed by the professional nurse involved

Planning 2nd cycle : Timetable

Mon	Tues 2:3 - 8:9	Wed	Thur	Fri 2:3
	Assessment fever & ear 96			Assessment
				Management & anatomy 177
	Diagnosis			Theme 2 worms
	IPP level 1			Diagnosis anatomy
	Theme 3			Assessment
	immunization			management & anatomy
				Diagnosis anatomy 178
	immunization			

Summative assessment

Paper 1 (3 hours)	
IMCI and accompanying theory	55
Theme 1:	10
Theme 2:	10
Theme 4:	15
Theme 5:	20
Professional practice	10
TOTAL	120

Reflection: Cycle 2

Always be ready for any surprises in life...



Reflection: cycle 2

- ◆ Students did not attend orientation session
- ◆ High bandwidth needed for video files
 - Network resources were limited during campus-wide student registration
- ◆ Students did not follow assignment submission process correctly
- ◆ Logistical problems with computer venues

Reflection: Cycle 2

◆ Students:

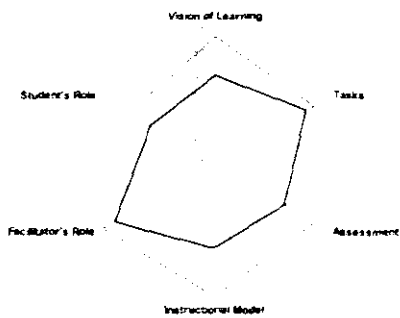
- difficult to read on computer
- feedback took too long
- computer too slow
- did not print or made copies
 - enjoyed it
 - did it late at night at home

Reflection Cycle 2

◆ Facilitators

- Took too much time to comment on assignments
- Due to incorrect submission process files would not open and were therefore not marked
- Frustrating
- Integration with theory worked well
- Clinical workbook activities were an improvement but still not effective enough

Engaged Learning: Cycle 2



Discussion: 10 min

- ◆ Please comment on the advantages and disadvantages of the two implementation strategies.
- ◆ Do you think it was necessary to change the delivery mode after the first implementation? Please motivate your answer.

Planning: Cycle 3

- ◆ SA DoH adapted IMCI to South African needs.
 - Case studies changed
 - Improved on HIV/AIDS
 - Separated Malnutrition and anemia

Planning: Cycle 3

- ◆ Only assess and classify were on computer.
- ◆ Computer (WebCT) marked submissions and gave immediate feedback
- ◆ As photographs were already on WebCT it remained as computer activity
- ◆ Was done in second half of semester

Planning: Cycle 3

- ◆ Orientation day scheduled after University has already started
- ◆ DoH provided hard copies of adapted modules and chart booklet for current students
- ◆ Activities are in separate book than reading material

Planning: Cycle 3

- ◆ Had theoretical classes about TB, immunity, HIV AIDS, anaemia and worm infestations before starting with IMCI
- ◆ Rest of IMCI was done face to face again with a ratio of 20 25-1
- ◆ Theoretical assessment remained the same as previous years

Planning: Cycle 3

- ◆ Clinical assessment: case study was added and was part of practical semester mark
 - └ Repetition and implementation of theory
 - └ Multiple skills
 - Making appointments
 - Obtaining consent
 - Apply skills taught
 - Recording and documentation
 - Writing skills

Cycle 3: Case study

- Technical skills (computer)
- Application of professionalism
- Interpersonal skills (relate to mother)
- Literature research

Cycle 3: Case study

- ◆ Forms part of the practical module mark
- ◆ Not exceed 8 typed A-4 sheets of paper. 12-point font size, and at 1.5 spacing
- ◆ The title page, table of contents, and addenda do not form part of the 8 type-written pages
- ◆ Only the first 8 pages will be assessed
- ◆ Should do your own typing on computer

Cycle 3: Case study

STEP 1

- ◆ Select the infant/child (<5 years) who will be the subject of study when you write your IMCI case study

STEP 2

- ◆ Obtain written permission from the patient

Cycle 3: Case study

- ◆ Write a short introduction. Correct and complete 2
- Health care center where infant child was seen Incomplete 1
- Date of assessment Not done 0
- Age of the infant child
- Weight of the infant child
- Temperature of the infant child
- Give a brief description of the child's problems
- Indicate if this is an initial or follow-up visit
- Give a brief overview of what is to follow

Cycle 3: Case study

- ◆ Draw up a bibliography. 100% 5
- AUTHOR, INITIALS. Year *Title*. Place where published. Publishers. 75% 4
- AUTHOR, INITIALS. Year. Title of article. *Journal*. Volume, p. 50-75% 3
- At least four sources must be used 25-49% 2
- Recent (<10 years) 25% 1
- Alphabetical Nothing 0
- Consistent order
- Consistent punctuation
- Separate page
- Detailed references

Reflection cycle 3

- ◆ Students
- Lekker! Modern and not boring
- More computer activities
- Very appropriate
- Felt it was easy and very relevant
- You see in clinics what you are learning in theory.*
- Schedule earlier in semester

Reflection cycle 3

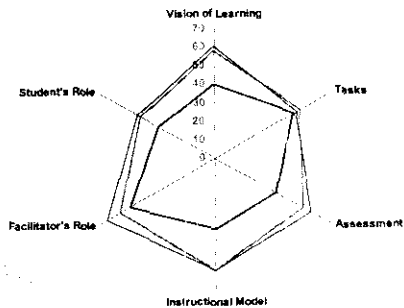
◆ Facilitator

- Computer was effective
- Reduced work load as not necessary to comment on submissions
- Students need face to face interaction when doing treatment
- Hard copies are necessary (hand back to School after completion of semester)
- All students need a chart booklet to keep

Reflection cycle 3

- IMCI needs to be done at beginning of year
- Videos on computer/CD-Rom
- Having done HIV/AIDS, anemia & worm infestation before commencement of IMCI had some advantages

Reflection cycle 3



Conclusion

- ◆ Necessary to equip nursing students with IMCI knowledge and skills
- ◆ Should be integral part of the syllabus
- ◆ Should be included in continuous and summative assessment
- ◆ Try various strategies and select the best way for your institution and circumstances

Discussion: 10 min

What recommendation regarding the process for identifying and making improvements to IMCI pre-service training delivery will you make?

Thank you very much for your attention.

Baie dankie vir u aandag

Kea leboa

Echoing Information: An Effective Way of Reaching Many Providers in Africa

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Appendix: Echoing information: an effective way of reaching many providers in Africa

Pamela Lynam, Nancy Koskei, Eileen Welsh, Margaret Meme

1. The Need

Prior to the revised 1997 Kenyan *Reproductive Health/Family Planning Policy Guidelines*, organized dissemination of new policy in reproductive health/family planning did not exist. Guidelines were placed in the hands of policy makers, administrators and medical department members for distribution, rather than dissemination. Trainers and service providers did not know how to translate policy into practice.

2. The Intervention

In 1997 The Kenyan *Reproductive Health/Family Planning Policy Guidelines and Standards for Service Providers* were updated to reflect current advances in contraceptive technology and harmonized with WHO reproductive health guidelines and standards. JHPIEGO took on the task of disseminating these guidelines to reproductive health nurses working throughout Kenya.

A **training package** (*SDG Dissemination*) was developed, reflecting the updates on contraceptive methods. In addition to the SDG training presentation, another version, called an **orientation package** was created. The orientation package was significantly shorter and focused on major changes in the guidelines. Additionally, a laminated **job aid** was used (English on one side and Kiswahili on the other), summarizing a key point of the Guidelines. An approach to using the package (called **enterTRAINment**) was developed around the package. Thirty-five trainers came to Nairobi to receive the SDG training. A subgroup of trainees received additional training using the abbreviated orientation package. Within the orientation package subgroup a smaller group was identified to receive **support supervision** in the future.

JHPIEGO training methodology prescribes **interactive sessions**. At this session an approach, sometimes called **enterTRAINment**, was employed. This technique uses humor, surprise and repetition -- an interactive, attractive and energetic way of getting information across -- in an effort to have the participants internalise concepts.

Key to the SDG dissemination is the fact that **each participant** had his/her **own copy of reference materials** and a laminated jobaid. The training was enhanced by the “official” nature of the new *National Guidelines*. They added legitimacy to the proceedings, promoting participant acceptance of practices that were unfamiliar to many.

Perhaps the clearest explanation for the success of this “better practice” was the use of the **Kenyan decentralized training system**, established by the Ministry of Health in the 1980s. Since 1992 JHPIEGO helped strengthen the decentralized training system by supporting district-based training teams. Using this system JHPIEGO developed a cost effective, model approach to training called the “echo training system.”

3. The Application

The **DTC network** was used exclusively for the training, which was initially conducted at the central level, replicated at the district level by DTC training teams and again at the site level, completing the “echo” cascade. Over 6000 service providers were trained with evidence of dramatic change in their behavior and practice. This network made it possible to provide updates to large numbers of staff with minimum resources, even in remote areas. **Interagency cooperation**, that is, cooperation of the Provincial Medical Officers, the DTCs, and the Department of Primary Health Care enhanced the effectiveness of the training. The intervention was independently evaluated by Family Health International (FHI) and Population Council.

4. The Results

FHI and Population Council measured pre and post-intervention levels of knowledge, practice and attitude. In addition to the standard guidelines package (called SDG), some trainees received the orientation package (OP). Within that subgroup some trainees also received support supervision (SS), six months after the training. This additional intervention strengthened (in some cases doubled) training effectiveness.

Using the DTC network was extremely effective in changing knowledge and practices of providers. For example, providers who knew of the conditions necessary for LAM increased from 5% at baseline to 33% after the intervention. Similarly, new clients advised to use condoms in addition to a regular method increased from 40% at baseline to 57% at follow-up. New clients denied services due to non-menstruation declined from 18% at baseline to 0% after the orientation package and support supervision interventions.

5. Lessons Learned

- This approach gets beyond the ‘usual suspects’ in training. It reaches the hard-to-reach – many participants at the echo orientations had not been updated for 10 or 15 years.
- Additionally, it reaches the most motivated – those who want to learn without the added benefit of a per diem. Other lessons we have learned from this program are:
- Great materials are a key to success. This was stated again and again by stakeholders and participants
- Stakeholders should have input into the whole program, so that it is theirs
- Partnerships and good relationships between all the players not only leads to success, but leads to pleasant and fruitful continuing working relationships.
- It is possible to train large numbers of providers EFFECTIVELY
- We believe that this method of reaching large numbers will be found to be cost effective when compared with traditional approaches
- Support supervision or ongoing contact is key to success

6. Challenges

Care must be taken **not to compromise quality** when deciding to use shorter training sessions, orientation packages and updates. Re-deployment and frequent trainer and service provider transfers can erode training (and service delivery) systems. Transport and road conditions pose major constraints to progress with training, as do the state of

repair of some training venue sites. Cost of the addition of support supervision might be unaffordable and is currently being analyzed.

7. Future Directions

This system could lend itself to many other areas of health care, such as malaria, STD/HIV/AIDS, adolescent health, neonatal care, safe motherhood and post abortion care. We recommend the use of this system for any **future in-service (or pre-service) orientation** of health care personnel in Kenya.



Echoing information: an effective way of reaching many providers in Africa

Dr Pamela Lynam, JHPIEGO, Nairobi
Ms Nancy Koskei, JHPIEGO Nairobi
Ms Eileen Welsh, JHPIEGO consultant
Dr Margaret Meme, Division of Reproductive Health, MOH, Kenya

1

Format of the Session

1. Introductions/Overview
2. Brainstorming – what works/what are the constraints in 'traditional' training of many healthcare providers?
3. An approach that works: RH/FP for inservice providers by echo orientations
4. Some results
5. Lessons learned
6. Discussion

2

1. Introductions/Overview

3

Brainstorming

What works/what are the constraints in 'traditional' training of many health care providers?

4

Summary of RH/FP Echo Orientations

- Great Standards & Guidelines produced
- However, nobody knew about them – passive distribution did not work well
- Innovative dissemination methodology
- Effective dissemination package
- Interactive training methodology
- Rigorously evaluated
- Results – this method of dissemination works!

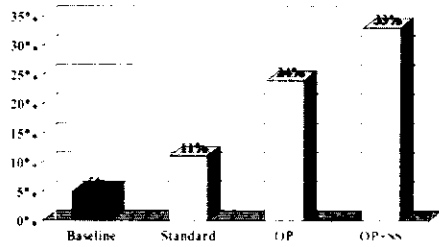
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Some Results

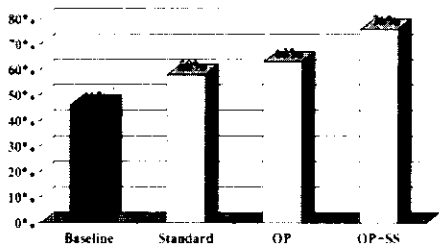
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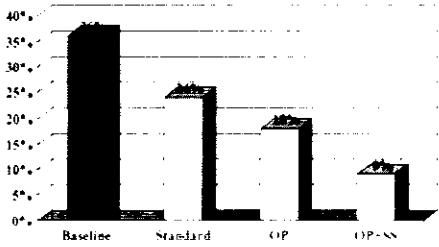
Providers who knew the 3 LAM conditions



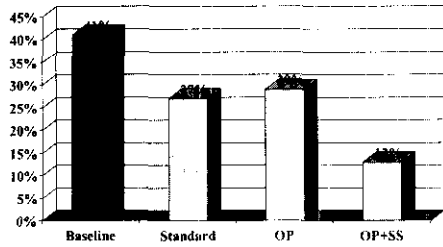
Providers who know that IUDs are good for 10 years



Providers who think vaseline is a good condom lubricant

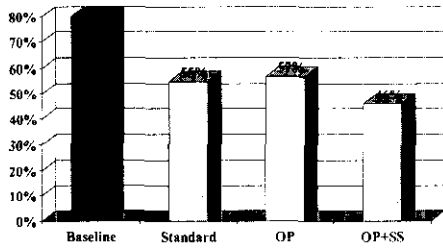


Providers who think Depo can cause permanent sterility



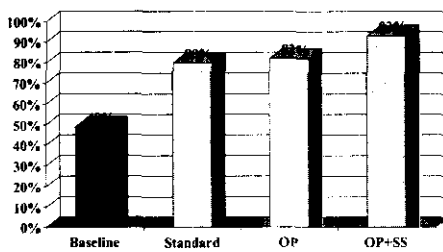
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Providers who think tarnished IUDs are contaminated



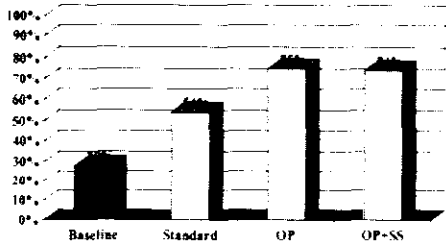
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Providers who had heard of EC



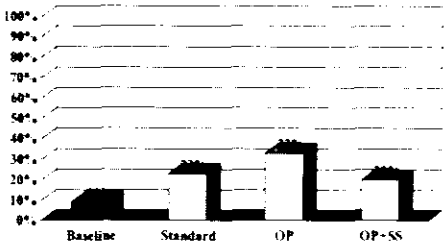
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Providers who could correctly define EC



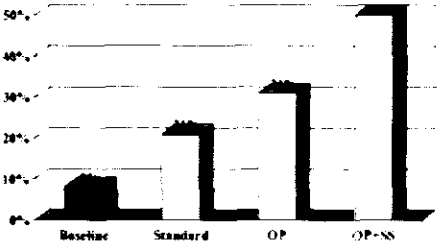
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Providers who had provided EC



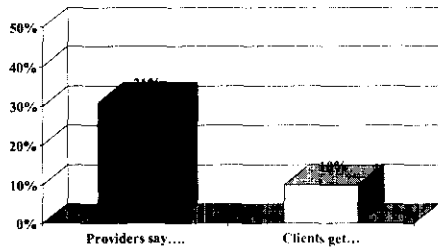
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Providers who say they give 6 or more cycles to continuing users



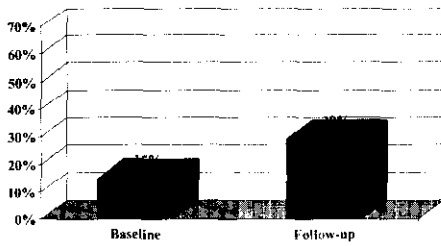
15

Provider vs. continuing client reports on 6+ pill cycles given



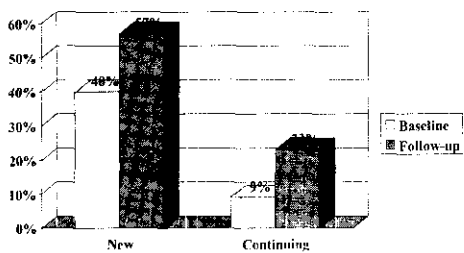
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Clients advised to use condoms in addition to regular method



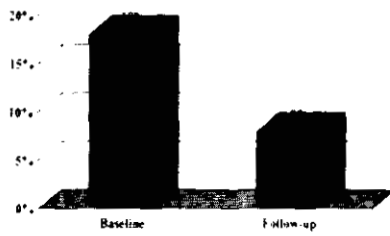
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Clients advised to use condoms in addition to regular method



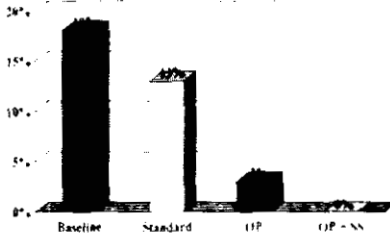
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New clients denied services due to menstruation



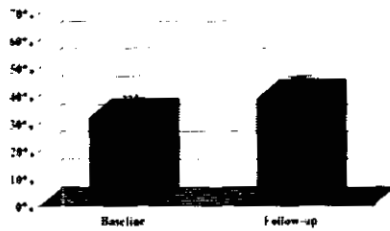
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New clients denied service dues to menstruation



30

Proportion of New Clients who are Non-Menstruating 1998 vs. 2000



31

Conclusions

- K.A. and even P. improved
- Improvement sustained
- "Echo effect" worked
- More reinforcement → better outcomes
- First conclusive evidence in Africa that guidelines work

22

Highlights

- True teamwork:
 - MOH (DPHC, DTCs, DPHNs, PMOs, MOHs)
 - Between MOH and JHPIEGO
 - Between CAs (JHPIEGO, FHI, Pop Council)
 - Between donors (MAQ/AID-W; AID-K; DFID and EU, through KFHP)
 - Within office

23

Highlights

- This approach (echo; snowballing; cascade; second generation; trickle-down; rollout) with simple package worked –
 - effective
 - efficient
 - extensive (estimates between 6,500 and 10,000)

24

Highlights

- Built on established decentralised training system
- Great materials and interactive training are important
- Specific barriers addressed (eg menstrual barrier reduced by half)

25

Highlights

- Simple (orientation, not 2 week training)
- Took training to participants
- Frontline/grassroots providers
- Importance of supervision
- Training strengthened the system, and vice versa.

26

Observations from the field

- many SPs had no update for 15, 20 years
- very poor knowledge amongst the majority of SPs, even though they are the ones providing services
- few materials out there
- frontline sites rarely supervised externally

27

Observational from the field

- incredible enthusiasm - providers and clients
- thirst for knowledge
- 1-2 days too little, since this was not an update (as intended), but turned into a basic course
- challenging to change practices
- trickle down effect can be far-reaching
- Any healthcare area can now be dropped into the system

28

4. Lessons learned

29

Lessons Learned

- This approach get beyond the 'usual suspects' in training: they reach the hard to reach
- It reaches the most motivated
- Great materials are key to success
- The program and materials should be developed by key stakeholders
- Strong partnerships are a key to success

30

Lessons Learned

- Large numbers of providers can be trained EFFECTIVELY
- These methods are cost effective
- Support supervision or ongoing contact is key to success
- Recognition for learners is important

11

5. Discussion

12

“Pattern Language,” a Tool for Designing Spirited Training

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“Pattern Language”

A tool for designing spirited training

“[Certain patterns] create life by allowing people to release their energy, by allowing people themselves, to become alive. Or, in other places, they prevent it, they destroy the sense of life, they destroy the very possibility of life, by creating conditions under which people cannot possibly be free.” (Alexander, 1979:105)

PATTERN LANGUAGE IN LEARNING GROUPS

Abstract

Pattern language is a tool for designing learning experiences and for helping new trainers see how a group is learning or not. Patterns are the basic elements that make up this language. Patterns resolve contradictions between what we want and what is actually present. Using patterns rather than techniques allows new teachers or trainers to find their own voice and style in resolving the contradictions. For experienced trainers, patterns are a way to fine-tune designs and make sure that the teaching plan leads to learning.

Introduction

Pattern Language is a concept explained by architect Christopher Alexander in his book *The Timeless Way of Building*. In this book he develops a theory that describes in modern terms an architecture that is as ancient as humanity itself. *The Timeless Way of Building* is the introductory, theoretical volume, in a series of three books published in the late 1970s by the Center for Environmental Structure in Berkeley, California. Alexander writes, “There is one timeless way of building. It is thousands of years old, and the same today as it has always been. The great traditional building of the past, the villages and tents and temples in which man feels at home, have always been made by people who were very close to the center of this way. And as you will see, this way will lead anyone who looks for it to buildings which are themselves as ancient as their form as the trees, the hills and as our faces are.”

This “timeless” way is what brings life to buildings. “It is a process that brings order out of nothing but ourselves; it cannot be attained, but it will happen of its own accord, if we will only let it.” (Alexander, 1979:ix)

Alexander refers to our innate wisdom, or our intuitive knowledge about buildings “that are right” and how they influence our mood and spirit. We can all recognize a building that gives life and that inspires us, that gives us energy. We can also recognize instantly a building that drains our energy, that takes our spirit away. Sometimes we are aware of these feelings, sometimes we are not. In either case, the architecture around us, our physical environment has something to do with our feelings of aliveness or un-ease.

From buildings to organizational environments

It is a small step to move from buildings to organizational environments. And, with the current emphasis on learning organizations, another few small steps to move from organizational environments to organizational arrangements for collective learning.

This workshop emerged out of a series of questions, triggered by the reading of Alexander's book: Is it possible that there is an organizational equivalent to the architectural concept of "patterns that give life?" Could we look for the patterns that give life and that destroy life in groups that claim to learn, and from those build up a repertoire of patterns and create a (new) pattern language to support the transformation of the workplace in very practical and exact ways? And if so, is there a fluid "code" as in genetic code, which generates this same "quality without a name" in group processes that Alexander describes for living/workplaces, a code that brings life to the group and the individuals? Is there some process which takes place inside a person's mind, when he allows himself to generate a meeting of minds that is alive?"

The notion of patterns and pattern language

"[Certain patterns] create life by allowing people to release their energy, by allowing people, themselves, to become alive. Or, in other places, they prevent it, they destroy the sense of life, they destroy the very possibility of life, by creating conditions under which people cannot possibly be free." (Alexander, 1979:105)

If there weren't any patterns in our language, we would have a very hard time creating sentences and communicating, because each time we would have an endless variety of word combinations to make a sentence, and we would have no way of distinguishing those combinations that make sense from those that don't. Pattern language in architecture is no different. Each part of a room, each house, each neighborhood, each town or region has to follow certain patterns "to make sense." Each pattern is embedded in a larger pattern and all the pieces are related to one another.

This phenomenon of interconnectedness is equally present in places where we are supposed to learn. Course objectives, visual stimuli, comfort and layout of room and furniture, participant materials, demeanor of trainers and the way participants or trainees are welcomed and inducted into the learning process are interconnected and either mutually reinforce or undermine one another.

Teaching and designing

Experienced teachers or trainers¹ have accumulated much tacit knowledge during their careers about what makes for extraordinary and transformative learning experiences. There are of course some basic requirements for any kind of training, and those are codified in countless teacher training and TOT² manuals and courses. But each experienced trainer adds something important to that body of basic teaching knowledge that is hard to transmit to a new generation of trainers. This "quality without a name" becomes indistinguishable from our personality and our experience, and therefore hard, if not impossible to reproduce for novices. The dilemma for each seasoned trainer is how to teach this "extra" knowledge without asking the new teacher to become a carbon copy of him- or herself, and risking to leave the new teacher feeling discouraged because the gap is just too big.

Pattern language in learning groups

¹ Teaching and training, in this paper, are used interchangeably.

² Training of Trainers

Pattern language is about making explicit this “quality without a name,” this innate knowing of “what gives life” when groups come together to learn. Not just the innate knowing of the teacher but also the innate knowing of the students. The use of pattern language allows the group to unearth its own wisdom and use a “timeless way of being and working together.” This “timeless way” in groups is no different than Alexander’s “timeless way,” “[*this process that*] brings order out of nothing but ourselves, and that can only be attained if we let it happen.”

What are we trying to create?

When a group of people, adults, children or both, come together to learn, we want to create an atmosphere in which people fuel each other’s self-confidence, sense of personal power and autonomy, the feeling of being significant and the hope of being able to make a difference. We call such an experience (whether in a classroom, out in the workplace or on a field visit – or some combination of those) *spirited* training, an event where the human spirit can soar. If learning environments cannot release such feelings, then they are deficient, no matter what the specific learning objectives are.

Patterns for spirited training

Patterns exist in relationship to a vision of what we want to create. Patterns tell us where we can find the resolution of a tension that exists between what we want and what exists. As such, higher-order patterns are similar to what Dee Hock refers to as *principles*, “behavioral aspirations of [a] community, a clear, unambiguous statement of a fundamental belief about how the whole and the parts intend to conduct themselves in pursuit of the purpose.” (Hock, 1999) They are not prescriptions. They do not tell us how to act exactly.

Alexander’s architectural patterns are nested, and exist in a hierarchical order, with higher-order patterns setting the tone for lower-order patterns.³ [We have not yet figured out whether this is the case for patterns in learning groups.] Identifying the patterns is not a linear step process, nor a two-dimensional blueprint. Much as Alexander’s actual building process, in which he uses the selected patterns to build, there is a lot of trial and error in identifying the patterns. And then, when applying them to a training event, there is a lot of experimentation, imagining “what if,” putting stakes down and pulling them up, repositioning them, trying things out, revisiting the vision, seeing the tension again, clearer this time.

In our search for “good patterns,” we also came across “bad patterns,” those that take the spirit out of training, the ones that make people defensive, afraid to look silly, that kill curiosity, that focus on comfort to the detriment of learning, that insert control where none is needed. We don’t need to list them because the patterns that follow undo them, automatically. Thus, here are the patterns we have begun to see emerge as we strive towards this desired state of “spirited training.”

Each pattern is numbered and given a name. In the descriptions below we have followed Alexander’s structure for describing patterns (see Alexander’s Volume II: A Pattern Language in which he describes 254 patterns). So far, with help from a small number of people⁴ who share our enthusiasm for the concept of pattern language as applied to learning groups, we have identified twenty-one patterns. We list what we have seen as the problem, something that interferes with this vision of *meeting minds and soaring spirits*. Finally, in italics, we propose a

³ To illustrate this notion of nesting, consider how the pattern of a door becomes part of the pattern of an entrance way, which becomes part of the pattern of houses looking out on a street, which then becomes part of the pattern of a neighborhood, etc.

⁴ These include Joe and Rita Sterling, Axel Magnuson, and Bob Kramer

resolution to this problem, without exactly prescribing specific trainer or facilitator behaviors. Sometimes we have added a quote that speaks to the particular solution. This is still very much a work in progress. We are still *reshuffling and renaming* the patterns. They are tentatively put into categories, which may again change as the number of patterns increases.

How to use the patterns

According to Alexander, "Each pattern is a generic solution to some *system of forces in the world*. But the forces are never quite the same. Since the exact configuration of the surroundings at any one place and time is always unique, the configuration of the forces which the system is subject to is also unique – no other *system of forces is ever* subject to the same configuration of forces." (Alexander, 1979:147). The implication of this is that when we design training or when we teach new trainers, we can never superimpose a recipe for action (do this, then do that). The configuration is always unique. As we work in different cultures we will find that there is always a peculiar interaction between the unique cultural forces of that place and that time with the universal human longings that the patterns speak to. Thus, the situation is always unique, and no prescriptions will do, because no one has been there before, quite in the same way.

Furthermore, according to Alexander, "Each pattern is a relationship between a certain context, a certain system of forces which occurs repeatedly in that context, and a certain [spatial] configuration which allows these forces to resolve themselves. As an element of language, a pattern is an instruction, which shows how this spatial configuration can be used, over and over again, to resolve the given system of forces, wherever the context makes it relevant." (247-249). Thus, when designing training, or when teaching less experienced trainers, once we have covered the basics of procedures and techniques (doing a needs assessment, determining competencies, writing learning objectives, etc.) we use the patterns to help focus attention on the context and the forces that occur in that context and the facilitator interventions that will allow these forces to resolve themselves (as opposed to the facilitator/training organizers to resolve whatever problem exists in the context).

A reading of the various patterns, followed by a discussion can reveal which ones are particularly relevant or desirable. This then sets the stage for an exploration of ways in which these patterns can be actualized, drawing on the combined experience of the design group. In the case of teacher training or a TOT, aspiring teachers can begin to re-evaluate prior experiences through the lens of the patterns and look for manifestations of the patterns, or, for that matter, observe other trainers. This will enable them to expand their repertoire in ways that fit who they are.

PATTERNS FOR CREATING SPIRITED LEARNING EXPERIENCES

LEVEL ONE: PATTERNS TO MOTIVATE PEOPLE TO MOVE OUT OF THEIR COMFORT ZONE AND CONSIDER LEARNING

These patterns create a state of mind, a sense of anticipation, a sense of safety and an interest in the experience that is about to begin.

1. STIMULATING THE SENSES

Our mood is influenced by our environment. A colorless, windowless, unappealing environment depresses our spirits and easily triggers a flight reaction (coming late, leaving early, frequent trips to the bathroom, cigarette breaks, dozing off, doing other tasks, in short, not being present). *Therefore, the trainer or facilitator needs to create an environment that appeals to the eye, ear and spirit. Music, colors, poetry, light sources, scheduling of breaks are all ways in which to do this.* "Prospect, refuge, and visual ambiguity are physical qualities in the environment. Our eyes respond by wandering, looking, seeking, resting. As the eye moves, the mind is asking questions, being curious, moving into a mode of exploration and creativity." (Pergamit et al, 1997)

2. ALIGNED EXPECTATIONS

If people have no opportunity to express in safety their expectations for their presence in the room, tensions will arise later when expectations aren't met. *Therefore, the trainer, facilitator needs to create a safe space for people to explore and address the expectations and issues with which they came.*

3. RESPECT FOR LEARNING ANXIETY

The anxiety that accompanies learning is often greatly underestimated by trainers, especially less experienced ones. According to Ed Schein, "learning anxiety" is the biggest block to transforming organizational cultures. Learning anxiety is often expressed by participants as fear of loss of self-esteem, fear of looking incompetent, or fear of having to "unlearn" previously successful ways of thinking and acting. *Therefore, the trainer or facilitator must show deep respect for the potential "learning anxiety" of people who participate in their sessions: otherwise, "resistance" will be high and little genuine learning can take place.*

POWER DIFFERENTIALS

Especially at the beginning of learning experiences, trainers carry considerably more authority and power than participants. It is not uncommon for participants to project unconscious expectations, disappointments, or positive fantasies from the past onto an authority figure who may not be well known to them. At times these projections have the potential to inhibit or enhance the learning of participants as they transfer the past into the "here and now." Power differentials also exist between participants, though they tend to be more overt. *Therefore, trainers or facilitators need high levels of emotional self-awareness to recognize how power differentials between them and participants can hinder or enhance learning in the "here and now."*

LEVEL TWO: PATTERNS TO UNLEASH ENERGY AND REMOVE RESTRICTIONS TO LEARNING

These patterns create an environment characterized by freedom and playfulness to explore and experiment, where participants feel encouraged and supported, where learning is the norm, and where trust can be developed.

4. LIFTING OF SPIRITS/RELEASE OF ENERGY

The presence of spirit and energy is probably the most important resource a group has in order to achieve its learning tasks. *Therefore, the trainer or facilitator has to make sure that the collective experience lifts rather than depresses the spirit and releases the energy of individuals to the collective task. The best way to do this is to provide opportunity for wonder, excitement and (in organizational settings) the revalidation of the work as meaningful to the individual and society.*

5. OPEN SPACE

A restricted physical space restricts psychologically. *Therefore, whenever the available space is too limiting, the trainer or facilitator needs to look for ways to expand, either by using other adjacent spaces if possible, moving outdoors, removing furniture, or any other action to allow for expansiveness of conversations and ideas. This includes also temporal space. All this needs to be accomplished without violating agreed upon boundaries.*

6. SAFE CONVERSATIONS (or NO PLACE TO HIDE)

Most people do not feel safe to speak out about things that really matter to them or that are problematic, painful or controversial, when they feel exposed or vulnerable. This is usually the case in large groups (more than 8 people or so) when it convenes in a plenary session. Vulnerability increases when there's no place to hide behind (tables are taken away, a large group of strangers sits in a circle) or when it is not possible to speak in a low voice and be heard by everyone in the group. *If the purpose of the group's coming together is to learn together, some manageable level of vulnerability is required. The level of discomfort that individuals can tolerate (before they get paralyzed or flee) usually goes up as people get to know and trust one another. The set-up of the room, which has a direct bearing on people's sense of safety, should change accordingly.*

7. LEARNING AND COMFORT ZONES

People who are too comfortable do not learn anything significantly new. People who are too anxious cannot learn either. *Therefore, the trainer or facilitator needs to monitor closely each individual's sense of comfort. Those who are too comfortable need to be (gently) provoked or confronted. Those who are experiencing a sense of danger, need to be supported in re-establishing a feeling of safety. The various zones (comfort, learning, or danger zone) are different for each individual and the first two expand with increasing self-confidence, while the danger zone decreases. The trainer or facilitator wants to move people out of their comfort or danger zones into the zone for optimal learning. Mihaly Csikszentmihalyi suggests that "flow" emerges only when anxiety and boredom are in optimal balance.*

8. INTIMACY GRADIENT

Early in the training trust levels are usually low and people are still trying to find their voice and role, struggling with issues around inclusion and exclusion, leading and following, competence and intimacy. Exercises that provide an opportunity for people to give honest feedback to peers, or disclose hidden parts of themselves are more appropriate and have more impact when given later in the training. If given too early, when people are not ready,

they may backfire, driving the level of insecurity up and confidence down, compromising the creation of a conducive (enabling) atmosphere. *Therefore, trainers needs to carefully gauge the level of readiness of individuals to disclose and reveal hidden parts of themselves and others and adjust the dosage of such exercises over time.*

9. LAUGHTER AND LIGHTNESS

The absence of laughter and lightness takes away the hope for making breakthroughs, cut through barriers, and shift the dynamics of a group. *Therefore, the facilitator needs to create space for the possibility to laugh and leave oppressive reality behind from time to time, without it being an excuse to flee from difficult topics.*

LEVEL THREE: PATTERNS TO TAKE ADVANTAGE OF LEARNING OPPORTUNITIES

These patterns create an environment that triggers rich conversations and learning everywhere, that is creative in seeing underutilized resources for teaching and learning, and where everyone is both teacher and learner.

10. SELF IN GROUP

Whenever people are allowed to act unaware of the impact of their own behavior in a group, tremendous opportunities for learning and growth are missed. *Therefore, the trainer or facilitator needs to create opportunities for people to explore their own reactions as a member of the group and learn in the "here and now." This includes awareness of dominance, aggressiveness, passivity, defensiveness and the trigger events for those behaviors. Opportunities for people to give each other feedback, in a supportive but honest way, build mutual trust.*

11. DIGESTIVE AIDS

Experts or top managers have a tendency to bombard people with new ideas, decisions, analyses, theories and other information because they think "the people need to know." This can easily degenerate into information overdose, and more often than not the information washes right through the group, like a swollen river. Such a river drags with it valuable topsoil. "Information dumps" do the same, they erode confidence. *Therefore, the trainer or facilitator needs to produce the necessary structure (a task, a conversation guide, and a set of reflective questions) to help people digest information or decisions presented to them.*

12. ENERGY DIPS

Shifts in energy always happen in groups. The upward shifts in energy are obvious and great morale boosters. The dips are not as obvious. They tend to be subtle at first (a non specific feeling of something missing), which, if left unattended, becomes more and more visible. One usually sees increased "traffic" around the room, people visiting other groups, more and more people who are idle, looking bored, more and more lethargic group discussions, signs of shallow thinking and reasoning, low quality products. Such shifts provide unique "peepholes" into the life of the group after excitement has worn off, offering a view of how this group deals with energy dips: does it collude and wait for directions, or does it notice the dip and proposes to do something about it? *Therefore, the teacher or facilitator needs to watch for such energy dips and observe what happens. This may contain some useful data to help the group discover ways to re-energize itself, confront its own dependency and explore ways to break old patterns. This may also be a time to make some changes in the flow and timing of the program.*

13. REHEARSAL

The capacity of the brain for short-term memory is limited. Without rehearsal, repetition or some other kind of reinforcement, verbal information is retained in short-term memory for only about 20 seconds (Gazzangina et al., *Cognitive Neuroscience*. W. W. Norton, 1998). *Therefore, trainers or facilitators should plan purposefully to reinforce, with new or differing approaches, the main ideas they want to share with people.*

14. IMAGES AS MNEMONICS

The brain is a pattern-seeking device. Cognitive scientists report that the capacity for long-term memory of pictures is astonishingly high (*ibid.*). The eyes contain 70% of the body's sensory receptors. We have the capacity to absorb more information visually than through any other sense. "Thinking in pictures" is one of the primary ways we learn. *Therefore, trainers need to find ways to translate or connect abstract ideas, models, theories or concepts with visual imagery such as colorful posters, pictures, or cartoons.*

15. PEER TEACHING

The best way to learn something may be to teach it to someone else. Peer teaching allows participants to discover what they really understand and what remains confusing. It also allows them to "rehearse" what they have learned and find their own language to communicate it to others. *Therefore, trainers or facilitators should experiment with designs that incorporate peer teaching.*

LEVEL FOUR: PATTERNS TO SEE THE OTHER

These patterns re-arrange our sense of "self" and "other," providing opportunities to appreciate the gifts of the world around us, and to expand our repertoire for creative problem solving.

16. PLAYFUL OTHERNESS

Being with people who are most like us is comfortable but restrictive. Bringing in "the other" can throw people off balance and trigger self defenses. *Therefore, trainers should look for opportunities to let people experiment with "otherness" in a variety of forms that slowly expand people's comfort zone and let them explore their own prejudices and find common ground amidst differences. There are a variety of training techniques to facilitate this (e.g. role reversals, simulations, interviews, fishbowls, movies, drama, visits and fact-finding tasks).*

17. THEM + US = NEW US

If trainers don't interfere, people will find a seat in the beginning that is comfortable to them in terms of their relationship with the rest of the room (front row, sides, middle or back row) and the people near them (usually colleagues or friends). They will return to this same seat after each break for the rest of the training or class unless trainers intervene. If trainers do not intervene, except for the occasional group exercise, staleness enters the room, reinforcing the underlying message that we ourselves do not have to change and it is OK for everyone to stay in their comfort zones, both in regard to the relationships they form and the perspective they have on the room. *Therefore, by frequently changing name tents, as well as the constitution of groups, the facilitator provides opportunities for people to shift their perspective, and broaden their circle of acquaintances. This will help them test their biases and prejudices, and redefine who is "us." Sometimes this means creating groups that are as heterogeneous as possible (in terms of sex, age, professional and/or organizational affiliation), sometimes it means creating homogeneous groups to exacerbate differences between groups.*

18. DIFFERENCE IN SAMENESS

People who look similar from the outside can be more different than those who look different. Such differences can be "explained away" as personality problems and thus be discarded as something on which we cannot act. Although the latter assertion is correct (no one is going to change their personality because we want it changed), the former is not: what often goes for "difficult personality" usually means a difference in type, style or temperament. *Therefore, we need to name and acknowledge such differences, and explore ways to make them work for the good of the whole.*

LEVEL FIVE: PATTERNS TO LINK THE LEARNING TO "THE BIG PICTURE," AND REAL LIFE OUT THERE

These patterns both root the experience in real life and distinguish it from real life, presenting a set of concepts that are meaningful and that allow people to talk with one another across boundaries in ways that are not possible "out there," yet feel connected to the world "out there."

19. RETURN TO PLAN (for organizational retreats rather than classrooms)

If a group gets together to chart out its future but never refers back to what it had planned earlier, continuity is lost and so is the opportunity to learn from the past. *Therefore, the facilitator needs to include a review of what the group said it would do and an exploration why it did or did not accomplish those things, and help the group celebrate its accomplishments and at the same time extract lessons learned or things to do differently next time around.*

20. THEORY ANCHORS

Experiences that are not anchored in theory lead to drifting. People may drift in all sorts of directions, making it impossible to move a group forward as a whole. *Therefore, the trainer or facilitator should provide the necessary conceptual models, theories or frameworks to help people make sense out of the experience(s) and create a common language to help people to talk with one another about the experience(s).*

21. APPLICATION

Theories can be easily discarded as useless or academic if people have no opportunity to test them against reality. *Therefore, the trainer or facilitator needs to create opportunities for participants to test the theory or model and determine for themselves whether it makes sense. For example, theories about group phenomena can be tested against the experiences of the group (and the individual in the group) in the here and now.*

22. REAL LIFE

Classroom settings or retreat settings shield people from some elements of reality that can easily discourage or annul the positive effects of the sheltered experience. *Therefore, the facilitator needs to make sure that the group remains connected to the world of work "out there," by bringing the outside in and/or taking the inside out. This can be done through field visits, guest speakers or panel discussions that bring together credible practitioners. The trainer also needs to help the group transition back towards real life towards the end of the experience as a group, so that people leave with increased confidence in tackling the dilemmas out in the real world.*

23. MEANINGFUL TRANSITIONS

Training events, especially classroom training, are different from work routines, and unless beginnings and endings of such events are clearly demarcated, may easily fuse into "more of the same old, same old." Beginnings and endings carry great symbolic and cultural

meaning for people. *Therefore, the trainer or facilitator needs to consciously plan for a shift from "out-there" to "in-here," and from "in-here" to "out-there," and integrate this into the learning design rather than leave it to default or chance. Music, food, ceremonies, acknowledgments or rituals can ease the emotional pain and ambivalences of entering and leaving. Carolyn Egri, in a pioneering 1993 JME⁵ article on end-setting, shows how she consciously uses popular music with "farewell" themes and flip charts posted on the walls of her classroom as she and her participants bid a deeply emotional farewell to each other.*

LEVEL SIX: PATTERNS TO TAKE THE OUTSIDE WORLD BACK INSIDE

These patterns re-connect what is happening in the outside world with what is happening in the inner world, providing opportunities for learning and growth.

24. INTROSPECTION AND REFLECTION

Full programs and busy schedules tend to drive out time for reflection. Without reflection there is no introspection. Without introspection learning remains at arms-length, leaving values, habits and practices unexamined, and impact shallow. *Therefore, the trainer or facilitator needs to gauge when reflection is desirable, when it is critical and in what form it should take place. For example, reflection can be done privately in a journal, in meditation, during a walk, or in a letter to self; or it can be done collectively at the end of an exercise, an entire day, or course through a series of questions answered in plenary or in paired conversations.*

25. TIME-OUT FROM WORK

Relentless (course) work and routines, cries for immediate attention from things, people and details around us tend to crowd out awareness of the larger meaning of the work for oneself or one's group, giving short-thrift to what ultimately energizes and motivates us. *Therefore, the facilitator or trainer needs to look for ways to create a space to re-direct people's gaze to that what is considered worthwhile and valuable*

26. SELF-ESTEEM LEVERS

Low self-esteem skews the view of the world. Low self-esteem also narrows one's psychological range of motion. It is very hard to see the difference one makes when self-esteem is lacking. Confidence and self-esteem act as levers for translating what happened in the training setting into the difference that it aims to make. *Therefore, if the trainer is to make training "stick," he or she needs to find ways to boost confidence and self-esteem to increase the chances of experimentation, application and the to-be-expected mistakes.*

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⁵ Journal of Management Education (Sage Publishers).

Process to Develop Training Materials and Programs on Malaria during Pregnancy


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Essential Learning Methodology - Refining Content Selection and Tuning Instructional Strategies

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Essential Learning Methodology


Refining content selection and tuning instructional strategies

Wallace Hannum




Training Problems to Be Resolved

- **Excess content coverage**
 - Training programs are burdened with non-essential content
- **Inappropriate learning methods**
 - Training development fails to include tools that
 - screen proposed content
 - match content contributions with desired performance.



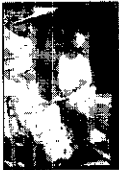
Essential Learning Methodology


- **Technique for developing learning solutions which address**
 - gaps in job performance
 - lack of knowledge or skills
- **Efficient, effective approach**
- **Systematic, analytical process**
 - selecting training content
 - distilling essential knowledge and skills
 - choosing most appropriate training methods to achieve desired job performance.



ELM Intent


- Focus only on essential training content
- Create engaging training
- Reduce training time
- Raise learning achievement





Foundations

- Job/task analysis
- Cognitive task analysis
- Instructional/learning analysis
- Minimalism
- Adult learning theory
- Meta-analyses of instructional effectiveness



Principles

1. *Learning should be linked with onsite supervision and reinforcement.*
2. *Learning experiences should be provided in an on-going way to satisfy the "on-time" learning needs of providers.*
3. *Training should teach learners how to recognize and correct errors in their performance.*
4. *Learners should be actively engaged and focus on real work during training.*

Principles

5. Training content should be from the learners' point of view and build on learners' prior knowledge.
6. Training should provide sufficient content for a learner to become proficient while omitting excess content that is not necessary for proficient performance.
7. Training should be related to learners' expected job performance and should develop the capacity to perform.
8. Training should be provided within a performance improvement approach that addresses the five performance factors.

PRIME II
Africa

Reducing Training Content

Potential Content

Essential Training Content

PRIME II
Africa

Learning Filters

Effectiveness

Learning Requirements & Design

Learner Context

Job Performance

Potential Content

Essential Training Content

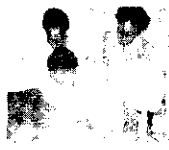
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Job Performance

Selection Factors:

- Prevalence
- Consequence
- Probability of correction
- Cost and benefits

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Learning Job Performance Requirements & Design

Performance Problem Filter

- Based on Performance Needs Assessment
- Supportive knowledge information
- Prior mastery of skill
- Direct transfer of skill
- Preferential knowledge and skills
- What if

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Learning Job Task Requirements & Design

Selection Factors:

- Universal
- Difficult
- Important
- Consequence
- Ease of learning
- Delay
- What if

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Job Performance

Job Task Filter


- Based on knowledge and skills gap identified above
- Uses selection factors to remove unessential tasks
- Defines essential tasks related to performance

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Learner Context

Selection Factors:

- Pre-existing mastery
- Substantial progress towards mastery
- Learning skills
- Level of prerequisite knowledge
- Motivation/interest




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Learner Context

Learner Profile and Context Filter

- Gathers general information about learners:
 - Work settings
 - Existing requirements
 - Resources for training and learning
- Removes job tasks and training approaches not relevant or appropriate for the learner group


PRIME I
Africa



Learner Context

Learner Capability Filter


- Uses sample group of learners to conduct
 - Interviews
 - Observation
 - Testing
- Determines essential tasks to be included
- Removes tasks learners can already perform




Learning Requirements & Design

Selection Factors:

- Required knowledge / information
- Supportive knowledge / information
- Prior mastery of skill
- Direct transfer of skill
- Prerequisite skill
- What if...






Learning Requirements & Design

Learning Requirements Filter


- Based on previous input from other filters, generates
 - Essential knowledge and skills
 - Learning goals and objectives
 - Types of assessment
 - Sequence and organization of learning
- Removes non-essential knowledge and skills
- Ensures match between objectives, assessments, and essential knowledge & skills



Learning Requirements & Design

Learning Design Filter


- Combines
 - previously-gathered information
 - previously-filtered elements
- Creates instructional strategy
 - Learning approach
 - Lessons & activities
 - Materials
- Ensures components of Instructional Strategy are
 - Necessary
 - Essential




Learning Effectiveness

Effectiveness Filter

- Focuses data sources
 - Pilot testing
 - Implementation
 - Assessment
- Revises and improves materials to increase effectiveness




Improvement in Training Methods & Activities



Enhancing Training Methods


- Seek methods with proven effectiveness
- Use learning activities with known success
- Shift to Evidence-Based Training
- Less reliance on traditional training



PRIME II
Africa

Multiple Strategies


- Simple communication of content is not sufficient
- Learners need support through multiple points of contact with content & instructor
- Conduct training to engage learners



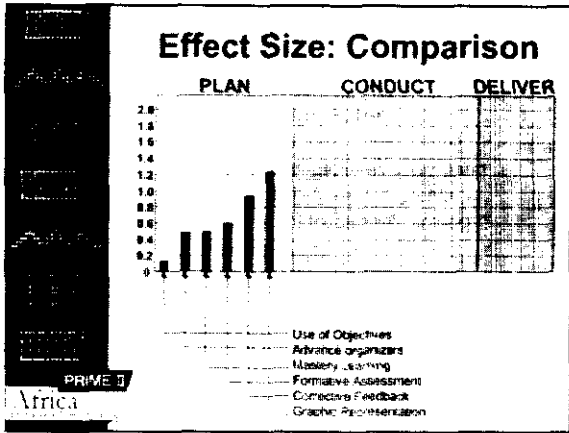
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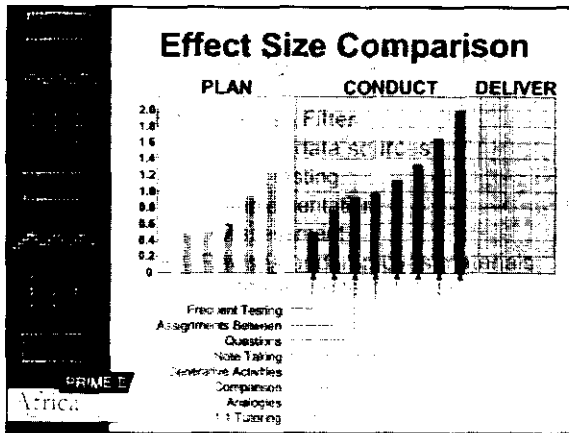
Sources of Information

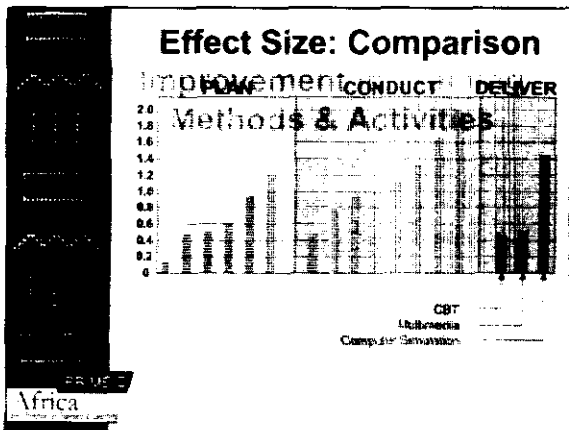
- Research in controlled settings
- Literature reviews
- Meta-analyses
- Professional judgement

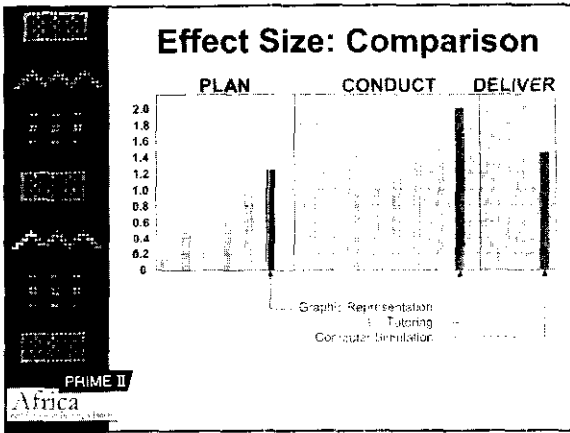


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Planning Instruction


Learning Factor	Effect size
Use of Objectives	.14
Advance organizers	.48
Mastery Learning	.5
Formative Assessment	.4-.7
Corrective Feedback	.94
Graphic Representation	1.24

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Conducting Instruction


Learning Factor	Effect size
Frequent Testing	.48
Assignments Between	.77
Questions	.93
Note Taking	.99
Generative Activities	1.14
Comparison	1.32
Analogies	1.65
1:1 Tutoring	2.0

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Delivering Instruction

Learning Method	Effect size
CBT	3-4
Multimedia	5
Computer Simulation	1-45



ELM Summary

- Focuses on engaging learners
- Controls content size
- Makes training efficient and effective



ELM Project

- FY 02
 - Developed approach
 - Prototyped mode
 - Initial trial
- FY 03
 - Further pilot testing
 - Development of training program
 - Print
 - Web-based
 - CD-ROM

Preservice Education: Lessons Learned from East Africa

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Preservice Education: Lessons Learned from East Africa

Presentation by:
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Reg. Training Advisor/Infection Prevention Specialist
&
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A Brief look at Uganda



Numbers of those observed, interviewed or Both

Institution	Tutors	Instructors	District officials
Mengo Sch Nurs&Midwifery	1	2	
Lira Sch Nurs&Midwifery	1	1	
Kabale Sch Nurs&Midwifery	3	3	
AHTC	2	2	
BSC Nursing	3	2	
Nursing Council			2
MOH-QA Division			1
MOH-HRD Division			2
MOH-Nursing Division			1
MOE&S-TV/BET			2
TOTAL	10	10	14

What is Preservice Education?

- Learning that takes place in undergraduate and graduate healthcare educational institutions (e.g., medical, nursing and midwifery schools) over a period of 1-6 years
- Ensures a basic set of skill competencies for a general healthcare provider (ideally, based on a job description for after graduation)
- Prepares students to become FP/RH healthcare providers (physician, nurse, midwife)

4

Advantages of PSE from Experience and the Literature

- Opportunity to disseminate updated RH policies and standards
 - Graduates practice what they see/learn from PSE role models
- Reaches more providers at once than through inservice training, ensuring common knowledge/skills
- Strengthens existing educational institutions, leading to sustainability
- Immediate changes result in the healthcare system...because PSE strengthening ensures a set of core competencies

5

PSE Advantages cont...

- Faculty/trainers become advocates for and role models of quality RH services
- More effective use of existing student learning time (more contact time for students)
- Development of model service sites for training (service delivery sites providing quality services in compliance with national standards)
- Strategies transferable to other disciplines (e.g., pediatrics, surgery)

6

Challenges in Preservice Education
cont...

Institutions

- Schools must fully implement new curricula: All trainers/faculty must be familiar with new curricula content
- Must have the materials needed
- Must possess the capacity to integrate new information
- Must have adequate practice
- Many basic infrastructure needs (e.g., classrooms, library, current reference materials, etc.)

Challenges in Preservice Education
cont...

- Linkages between PSE institutions and the MOH system
- Need ministry commitment to competency-based training to ensure appropriate clinical-site training
- Schools often have no direct control over MOH clinical training sites, coordination between them often doesn't exist

Challenges in Preservice Education
National/policy level:

- Curriculum integration must be accepted by Nursing Council, Ministry of Health and Ministry of Education
- Much coordination and unified support needed among internal and external stakeholders
- Rationale for number of schools
- Student:teacher ratios as well as county needs
- Competency-based licensure exam
- Deployment of trained graduates to appropriate service delivery sites

Challenges cont..

- Clinical skills of classroom faculty often inadequate
- Applying interactive learning techniques for large class sizes
- Large numbers of students at clinical training sites—caseload issues

NB: to do this trainers must go through trainer development pathway to ensure effective transfer of learning

Facility Challenges

- Nursing School:
 - Class size: 50-70 students
 - Lecture style—takes meticulous notes, few reference materials
 - Clinical preceptor provides different—sometimes conflicting—information
 - Only written exams for competency assessment

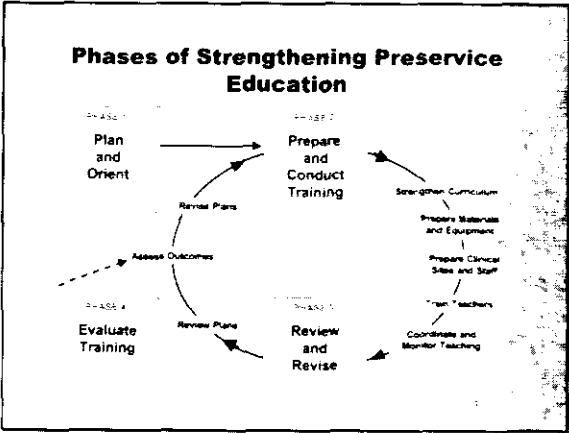


Challenges cont...

Once posted...does she have adequate skills to offer needed services?

Often the answer is "No"

- Regular inservice training needed
- Motivation for new skills—"add-on"
- Few faculty due to civil unrest
- Low salaries



Phase 1 – Plan and Orient

- Convene and orient stakeholders in pre-service education at national level in order to achieve consensus
- Create a national working group
- Conduct a needs assessment
- Develop a national plan of action
- Orient national and local level opinion leaders and decision-makers
- Create a curriculum strengthening group

Use the following process:

STEP 1

- -create a national working group
- -conduct a needs assessment
- -Develop a plan of action
- -Orient National and local level opinion leaders and decision makers
- -create a curriculum strengthening group

Phase 2 - Prepare for and Conduct Training

- Train the curriculum strengthening group
 - *Technical update*
 - *Clinical training skills*
- Strengthening the curriculum
- Plan for implementation in each institution
- Develop and produce teaching, learning and assessment materials
- Equip the teaching institutions

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**Phase 2 - Prepare for and Conduct Training
cont...**

- *Plan for implementation of strengthened portions of the curriculum in each institution*
- *Orientation additional faculty and relevant clinical staff*
- *Prepare clinical practice sites*
- *Train additional faculty and relevant clinical staff*
- *Support supervision to institutions and trainees*
- *Conduct and monitor teaching*

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Phase 3 – Review and Revise Training

- *Review the institutional plan of action*
- *Assess the methods and materials used*
- *Measure the outcome of teaching*
- *Revise the institutional plan of action*
- *Conduct review and revision visits at the national level*
- *Review and revise the national plan of action*

18

Cost-Benefit of Preservice Education

- Investment to initiate both inservice training and preservice strengthening is high at the beginning to develop the resources needed
- Cost benefit of preservice is demonstrated once the program is strengthened and resources are in place
 - Faculty and preceptors are trained and functioning
 - Curricula are strengthened and being implemented
 - Learning materials are developed and available
 - Clinical sites are upgraded.

Cost-Benefit of Preservice Education (cont...)

- Reduced need for recurrent inservice training cycles, saving scarce training resources
 - Students trained in essential services—thus productive service providers—when they take their place in the workforce
- Institutionalization of preservice education programs
 - Supported by country budgets which fund preservice educational institutions directly from their national budgets

Cost-Benefit of Preservice Education (cont...)

- FP/RH service delivery improved at clinical training sites
 - The number of clients increased over the period

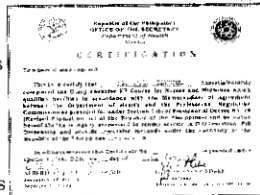
Findings

- Strengthened preservice FP/RH nursing and midwifery education continues in 9 schools in Uganda
 - Changing preservice education does not occur overnight but requires sustained support overtime
 - All schools continued to implement a clinical, skill-based FP/RH component
 - Competency-based training methods and teaching aids (including instructor's guides and reference materials) still being used

22

Trained Faculty Still in Place and Teaching

- Faculty assignments take into account faculty training and experience
 - All schools have at least one fulltime FP/RH faculty
 - 75% of faculty respondents received training through the TRH Project
 - Clinical faculty obtained government accreditation as FP/RH service providers for school clinics



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Preservice is an Important Investment...

- Preservice is sustainable after the initial investments are made
 - Trained faculty and revised curricula at educational institutions
 - Educational institutions often have their own line item in a national budget

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Preservice is an Important Investment...

- Cost-benefit of PSE seen fairly rapidly
 - Clinical-site upgrading, quality services being provided
 - Curricular revisions to change update what students learn
 - Ensures that scarce training resources are available for inservice training focused on refreshing and upgrading for complex sophisticated services

And It has Long-Lasting Effects.....

- Lasting impact from PSE
 - Students cite professors/mentors as models because they are respected senior clinical experts in a country
 - When they graduate and begin service provision, students practice what they've been taught
- on the foundation already established

Long lasting effects cont...

- Process of strengthening PSE for FP RH
 - Provides a foundation for competency-based humanistic learning
 - Can be applied to all content areas (maternal and neonatal health, PAC, pediatrics, cervical cancer prevention, etc.) in preservice education
 - Other content areas can be strengthened more quickly, building

A Balance is Needed in Any Healthcare System

A balance of preservice education and inservice training is needed:

- Inservice training is always needed
 - More appropriately focused on refreshing and upgrading for complex/sophisticated services
- Preservice education should focus on a set of core competencies
 - This ensures that all healthcare providers graduate with the basic FP/RH skill set to provide the needed services

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From students in Uganda



From students in Kenya

Thank You

Effective Methods of Training Community-based Health Workers

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Introduction

The Aga Khan Health Service in Kenya (AKHS, K) is a permanent and well-established provider of not-for-profit health services in Kenya. It has a broader mission of contribution to the health system of Kenya and the other countries of East Africa. A key aspect of this broader mission is the work of the Community Health Department (CHD), which trains community based health workers and health care providers in order to develop sustainable, effective, efficient and equitable healthcare system responsive to the needs of the deprived rural community.

CHD does not directly provide health care but acts as a *resource organization* providing technical support to service providing, partner organizations (government health services, community organizations, other NGOs and private providers) assisting them. From analysis of and reflection upon its program experience with its partners, CHD contributes to policy dialogue, advocating the formulation and refinement of health policies and strategies so that health services are increasingly relevant to the needs and expectations of rural and poor populations.

Background

Since Alma-Ata declaration (WHO 1978) several agencies have tried various strategies to ensure better health of the community. However, efficient management of scarce resources and the sustainability of the healthcare remain a challenge. With ever shrinking resources for health and development, planners are baffled with the issue of finding sustainable flow of resources and its efficient management to provide basic care to the population.

One of the ways in which the Kenyan health system has attempted to respond to this issue is by introducing the mechanism of cost sharing at the health facilities in the public sector. However, the healthcare system still remains fragmented with inadequate supplies and the management of scarce resources remains questionable. This has necessitated capacity building to health care providers and community based workers so that they are able to manage their own resources. A lot of responsibility has been placed on the local

community and health care providers especially at the peripheral levels to take charge of the affairs of health sector. This is a new phenomenon to many of them, which called for empowerment in skills building. CHD has been a partner working with the Government of Kenya towards realization of the principles of primary health care arising from the Alma Ata Declaration. CHD has participated in formulating policy dialogue and training community based health workers so that they are able to manage health issues at the community level.

CHD has trained community based health workers since the early 80s in its PHC and KHSP programs. To date a total of over 3000 health workers have been trained. The initial strategy was to train master trainers who it was assumed would continue training community based health workers in their areas of operation, which would ensure sustainability. However, a major review carried out in 1999 among the trained CBHWs showed that 30% of the master trainers were inactive. One of the lessons learnt from the review was that there was high attrition rate among trained CBHWs. Reasons for the high attrition included the expectation of the CBHWs that they would earn a living out of the community training which was not met; lack of confidence and fear of failure in their task which made some shy away. Another reason was that some trainers expected that after training, the NGO (Aga Khan Health Service) would put them on the pay roll, which never happened.

During the review, it was also observed that the criteria for selection of CBHWs was a major issue. Initially, participants for CBHW training were handpicked from among the powerful and those with strong influence within the community. Those selected for training were relatives of influential persons mostly politicians and village elders and acted as gatekeepers assuming that the training would land them jobs. As a lesson learnt CHD realized that commitment of CBHWs was difficult to assess.

From the review, it was also noted that the training methodology focused on the aspect of providing technical knowledge as regards to the health affecting the community like family planning, and immunization among others. It was learnt however that on the other hand participants do have inner fears, which are sometimes initial hindrances in learning and effectively articulating what they are taught to other community groups in the field when they are required to carry out further training. This inner insecurity is an aspect, which in many occasions is overlooked and hence not dealt with.

In training, many times trainees are taught on leadership skills. They are then expected to play a role in the activities at the village level having obtained the skills. However, it is not practical to produce a leader in just undertaking a one or two days session on leadership. Good performing leaders need maturity, confidence and ability to articulate the training topics to relate to people's lives. This is possible over some period of time especially with a lot of hands on and field experience. One of the points also noted in the review is that follow up is of paramount importance. Follow up helps the trainees to have a preview of what they are required or intend to train or facilitate. Thereafter, post

mortem of what is trained is thoroughly reviewed and any back up support is provided to trainees. This builds their confidence to handling issues, which they are in doubt.

These lessons learnt are not unique to Kenya alone; in the Philippines, Community Based Medical Practitioners (COMMED) has a training program designed to provide the community-based practitioner with the necessary skills to practice community medicine. However, COMMED doctors found that the skills necessary to promote health in the rural areas of their country were quite different from those they had been taught in medical school (CONTACT Christian Medical Commission, 1992).

Rationale

Health systems strengthening was one of the major activities deemed for the health sector since a lot of responsibilities was passed down to the periphery arms of the health structure. In the spirit of decentralization, the health facilities, which were at the lowest level of the health structure, were expected to take up more responsibilities in the management of health care in their catchment regions. This was a major challenge they encountered in the face of constrained resources and inadequate capacity in management and administration issues. As a result, one of the solutions was the capacity building through training of both the health staff and community members who were expected to work together in the improvement of the health status in their areas. In addition, they were expected to increase their resource base, which opened an era of cost sharing where the communities were expected to contribute towards funding of the facility through a system of fee for service. As much as cost sharing was a welcome attempt, the skills to handle financial management and wise use of the new resources generated was a challenge and hence required skills in this area.

During this time, CHD in turn put a lot of focus into capacity building of health personnel as well as community health workers with the main aim of making them responsive to the changes of the health system. In this evolution, CHD has become renown as resource organization in its capacity building programs, which ensures that training given to health care providers is holistic touching on all issues from quality of care, to management of health facilities. This has seen the production of modules on health information systems; financial management system, and organization and administration issues.

Capacity building has evolved from the ancient known classroom method. From a recent interview conducted by Aga Khan Health Service, Kenya in 2001 many health care providers agreed that for a long time the teaching has been a chalk and talk process; and this becomes a different situation once on the ground. For instance it is one thing to write an essay on leadership and styles of management, based on notes taken from lectures or from books in order to pass an exam, and another thing to actually manage in real and often constrained circumstances. As much as such training could be continued through pre service training seminars, these could be taught in a transmittal and theoretical manner rather than a participatory and practical way. (AKHS, K, CHD, 2001).

. In this process of developing the modules, CHD has also realized that, health care providers interact with the entire communities where they work who influence and contribute in a big way towards the success of good performing health facilities. This calls for them to understand what happens at the facility for them to be actively proactive in the activities of health issues around their facilities. Again it is has been realized that some of the community members who are expected to play vital roles at the facility and linking these activities to the villages need also capacity building. This therefore led CHD to include careful selection of all participants who would then be trained in an environment together with the health care providers, thereby creating a common ground where issues are articulated bearing in mind the views and perceptions of different participants. This enriches the whole training and ensures that once on the ground, it is easy work and relates the various functions of the different members of the community working at the facility.

This cumulated into the strategy that CHD uses with careful and vigorous follow up to those who are trained to give them support and carry on training on the ground.

THE STRATEGY

Our training programs have demonstrated that to achieve significant reproductive health outcomes the following need to be put in place.

The Selection Process

CHD has employed an elaborate and rigorous process through which the trainees are selected and recruited. CHD ensures that the trainees are drawn from a wide variety of disciplines and represent various sectors within the community set up. One of the key lessons learnt in our past experiences is that, attrition rate for those trained as TOTs (Training of Trainers) was high when there were not subjected to interviews. In view of this, CHD encourages interviews for persons to be enrolled for training. This helps to:

- Determine their level of interest and commitment in disseminating RH issues for behavior change, most of the time prospective trainees quickly jumped onto training for the sole purpose of acquiring a certificate.
- Ascertain their level of competence in comprehending and dissemination of RH issues
- Determine their willingness to continue training community on a voluntary basis or with minimal incentive this being in the face of diminishing resources. For this purpose, a track record of their involvement in community development projects is examined.

Training Methodology

Classroom learning even with the most advanced of training methodology is not enough. Our training programs are designed in such a way that most of the learning takes place on the ground. To achieve this, our programs ensure that the training curricula is designed in phases such that trainers have opportunity to have a feel of what is on the ground before further classroom learning takes place. This approach has enabled trainees to effectively

bridge the gap between "academia" and the real world. Secondly, the level of community trainee attrition is reduced and there is also further opportunity to screen trainees' level of competence and commitment before they get to subsequent phases of training.

Follow up support visits

There is strong element of onsite visits to the trainees, which enhances on the job training. Here CHD trainers have an opportunity to further train the newly trained trainees as they work. For instance the trainer could help the trainees identify gaps in the facilitation skills as they attend a sensitization meeting organized by the trainees.

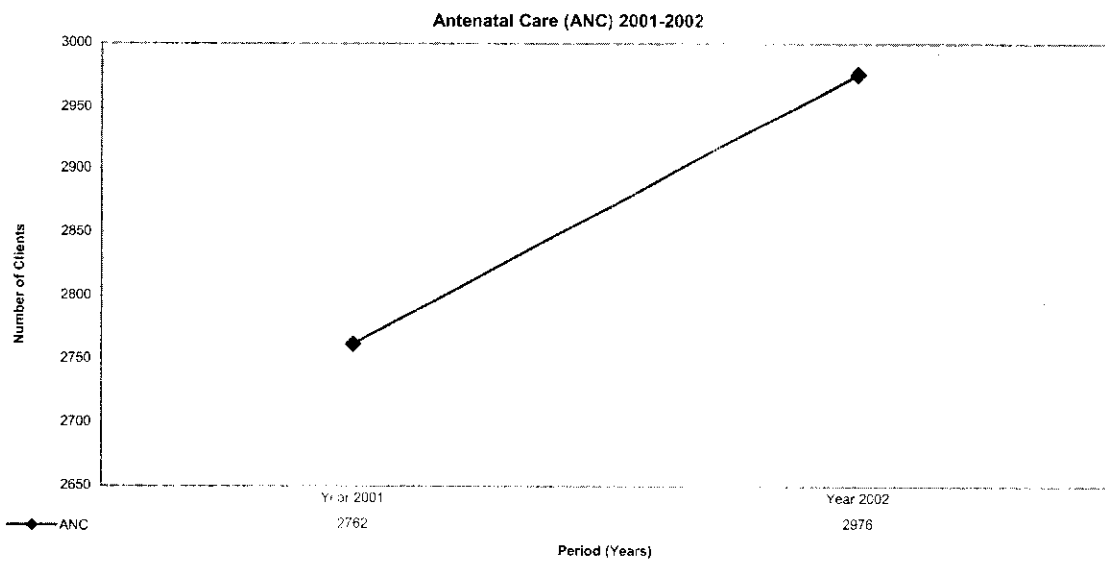
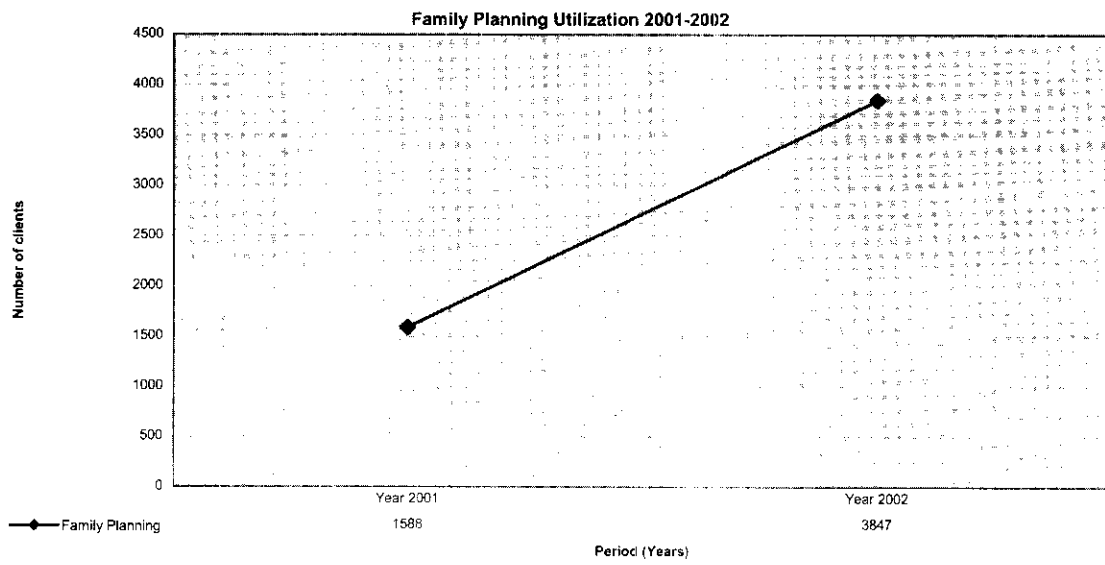
Onsite visits provide opportunity for thorough training needs assessment, which has helped our training programs become more effective. Such opportunities are on the premise on which our training curricula are reviewed to embrace the best of practices and to be relevant to the community.

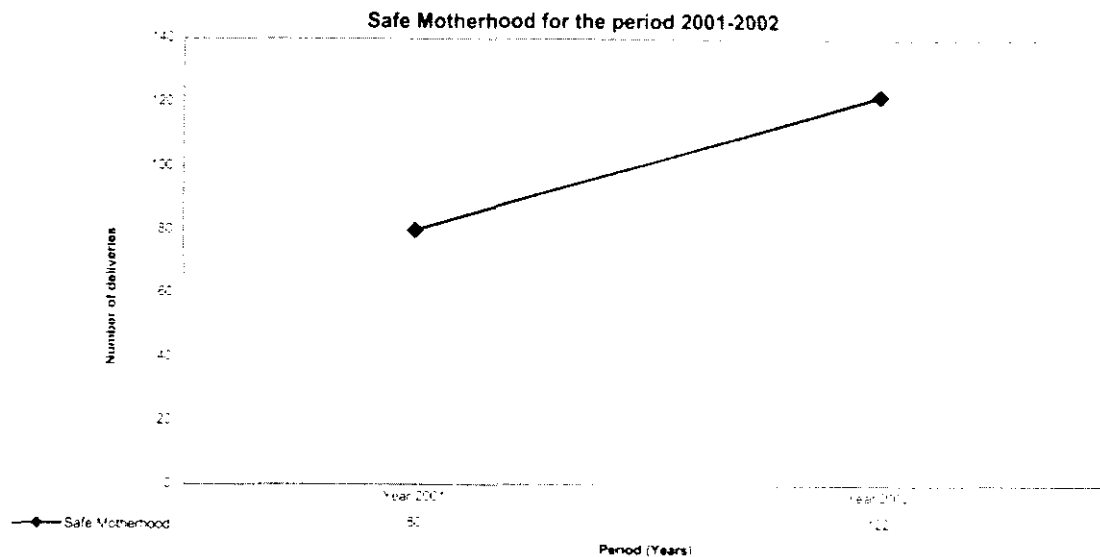
RESULTS

CHD training methodology has evolved over time as a result of prevailing political, socio-cultural and economic factors. CHD has worked with four peripheral facilities in Kilifi District, serving 34 villages with a catchment population of 36,616. There has been training to empower the local institutions i.e. the Dispensary Health Committees health center committees. The training has focused on Health Management Information Systems (HMIS), Financial Management, Governance and administration of the rural health facilities.

In addition CHD has trained Community own Resource Persons (CORPS), one from each village. The CORPS curriculum was geared towards equipping them as trainers and facilitators on Family Planning, Reproductive Health and Child Survival issues. This has led to continuous education in RH issues in the villages with intense and consistent supervision from CHD. This in turn has led to remarkable increase in stimulation of demand for and utilization of RH FP and CS services.

Findings from review of data (comparing benchmarking data in 2001 and utilization data in 2002) within the project area showed an improvement in service utilization. Number of family planning clients has increased by 142% from 1588 in the year 2001 to 3847 in 2002, ANC clients by 8% from 2762 in 2001 to 2976 in 2002 and number of deliveries assisted by trained personnel by 53% from 80 in 2001 to 122 in 2002.





Utilization	Year 2001	Year 2002	% Increment
Total Utilization	37060	54062	46
Family Planning	1588	3847	142
ANC	2762	2976	8
Safe Motherhood	80	122	53
Growth Monitoring	9502	13269	40

Conclusion

Training is a key intervention in improving performance of healthcare workers in Africa. Our experience shows that significant outcomes in delivery of reproductive health services have come as a result of

- An evolution of the training process. Before such remarkable outcomes were realized, significant failure was realized i.e high attrition of trainers among other things. There is need to appreciate the lessons learnt from failures.
- Extreme care has to be taken to ensure that hindrances that block the learning process are dealt with.
- Training alone does not necessarily result to transfer of learning. the trainer must be willing to go through the pain and effort of following up the learner on the ground so that they can identify with the problems that the trainees are undergoing.

EFFECTIVE METHODS OF COMMUNITY BASED HEALTH WORKERS

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1

INTRODUCTION

- The Aga Khan Health Service in Kenya (AKHS K) is a permanent and well-established provider of not-for-profit health services in Kenya
- Community Health Department (CHD) is part of AKHS K. CHD trains community based health workers and health care providers in order to develop sustainable, effective, efficient and equitable healthcare system responsive to the needs of the deprived rural community
- CHD acts as a resource organization providing technical support to Ministry of Health government health services, service providing partner organizations, community organizations, other NGOs and private providers.
- CHD contributes to policy dialogue, advocating the formulation and refinement of health policies and strategies

2

BACKGROUND

- Since Aima-Ata declaration (WHO 1978) emphasis has been on ensuring better health for the community (PHC)
- Major challenges have been efficient management of scarce resources and sustainability of healthcare
- In Kenya efforts in Health Sector reforms (HSR) include decentralization of Health care shifting the challenges to the peripheral facilities
- Community have also been enjoined to take responsibility in health affairs

3

BACKGROUND CONT.

- CHD since early 80s has trained over 3000 CBHWs to manage *health issues* at the community level
- Initial strategy was to train master trainers with the assumption that they would train other CBHWs at the community level in order to ensure sustainability
- A major review carried out in 1999 revealed 30% of the master trainers were *inactive*.

4

LESSON LEARNT # 1

- From the review the first lesson learnt was that there was high attrition rate among CBHWs. Why?
- Expectation of the CBHWs to get jobs after the training which was *not met*.
- Lack of confidence and fear of failure in their task hence shying away.
- The CBHWs expected that the organisation that trained them would put them on pay roll which never happened.

5

LESSON LEARNT #2

- Commitment of CBHWs was *difficult to assess*.
- This was mainly because the criteria for selection of the CBHWs was not laid out.
- Participants to the training were mainly handpicked from among the powerful and influential persons in the community.
- The trainees acted as gatekeepers assuming that the training would land them jobs.

6

LESSON LEARNT #3

[REDACTED]

- The third lesson learnt was that trainees do have inner fears which are initial hindrances in learning and effectively articulating what they are taught to the community
- This inner insecurity is an aspect that is usually overlooked and not dealt with during training
- And so as much as the training is done to provide technical knowledge, the training methodology needs to incorporate other factors which will address the fears.

7

LESSON LEARNT #4

[REDACTED]

- Follow up of trainees to ensure uptake of skills and provide technical support is of paramount importance
- Leadership skills is one of the lessons given to trainees, however leaders are not made after one or two sessions of training
- Good leaders need maturity, confidence, and ability to articulately relate what they are trained to people's lives
- This is an aspect which can be built through technical back stopping provided in follow up

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STRATEGY

[REDACTED]

- From the lessons learned in the review, CHD had employed an approach in its training programs to address the above issues
- CHD has been able to, jointly with the community develop a criteria for selection of trainees
- Another strategy used is that the participants are informed prior to the training and being recruited as CBHWs that they will be working on volunteer basis
- Selection of trainees is through local institutions which undergo a process of valuing and appreciating the CBHWs as their very own

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STRATEGY CONT.

- In the training methodology, CHD has ensured that this involves a process of self reflection.
- In this methodology trainees are facilitated to relate to the problems and try to find their solutions which in turn is a guide on how they communicate to the broader community members.
- The training methodology is also tuned to be holistic. As much as the technical knowledge on health issues is provided, this is enhanced with sessions on leadership, communication skills and other social attributes in a participatory manner.

10

RESULTS

- CHD has worked with four peripheral facilities in Kilifi District, serving 34 villages with a catchment population of 36,616
- Training to DHC/HCC focused on HMIS, FM, Governance and Administrative issues
- In addition CHD has trained Community own Resource Persons (CORPS), one from each village who are trained as trainers and facilitators on FP/RH and CS with intense and consistent supervision from CHD.
- As a result, there has been remarkable increase in stimulation of demand for and utilization of RH /FP and CS services.

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RESULTS CONT.

- Using the above training approach, CHD has trained CBHWs to work in the reproductive health area in the rural set up of Kilifi district of Coast province in Kenya.
- Data gathered from the field sites, compares benchmarking data in 2001 and utilization data of 2002.
- The data shows indicators for family planning utilization, Antenatal Care, Safe motherhood, and Growth Monitoring.
- There is a remarkable improvement of 48% in the Total Utilization (n=37,070 in 2001, to n= 54,060 in 2002).

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TABLE SHOWING UTILIZATION

Utilization	Year 2001	Year 2002	% Increment
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Family Planning	1588	3847	142
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Growth Monitoring	9562	13269	40

13

CONCLUSION

- Training is a key intervention in improving performance of healthcare workers in Africa.
- Our experience shows that significant outcomes in delivery of reproductive health services have come as a result of:
 - An evolution of the training process. Before such remarkable outcomes were realized, significant failure was realized. The high attrition of trainers among other things. There is need to appreciate the lessons learnt from failures.
 - Extreme care has to be taken to ensure that hindrances that block the learning process are dealt with.
 - Training alone does not necessarily result to transfer of learning; the trainer must be willing to go through the pain and effort of following up the trainee on the ground so that they can identify with the problems that the trainees are undergoing.

14

Participatory Training to Reduce HIV Transmission and AIDS-related Stigma/Discrimination

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**Participatory Training to Reduce
HIV Transmission and AIDS
Related Stigma/Discrimination**

*Dr. Asiwa Obishai
Dr. Damien Wohlfahrt*

 *Training in Africa: Best Practices
Lessons Learned and Future Directions
Zambia August 18-26 2003*

What is Stigma?

“An attribute that is deeply
discrediting”
and that reduces the bearer
“from a whole and usual person to a
tainted, discounted one.”

(Goffman, 1963)

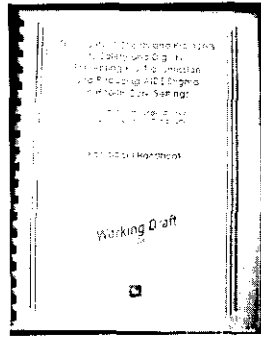
KWA 240

What is Discrimination?

- Any distinction or restriction based on exclusionary perceptions or attributes that restrict the rights of an individual
- Results in harmful actions or sanctions like violence and scapegoating

KWA 241

Why Target HIV/AIDS Stigma and Discrimination in Health Care and Health Workplaces?



Stigma, Discrimination and Health Workers

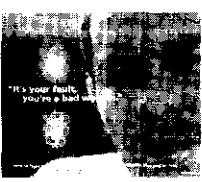
“There is an almost hysterical kind of fear . . . At all levels, starting from the humblest, the sweeper or the ward boy, up to the heads of departments, which makes them pathologically scared of having to deal with a HIV positive patient. Wherever they have a HIV patient, the responses are shameful”



(A retired senior doctor from a public hospital, currently working in a private hospital, India) www.avert.org

Health Workers Blame HIV+ Patients

“My colleagues, actually most of them, still think about the promiscuous behavior . . . The way I have heard other people talk about them is that this one or that one is very promiscuous, very sexually active . . . Or they blame a person.”



Obstetric/Gynecology Resident

“They do get HIV/AIDS either because of promiscuity or because of not taking protection”

Obstetric/Gynecology Trainer

ICRW Tanzania Survey 2002

Health Workers Blame HIV+ Patients (2)

"Even here you can hear nurses gossiping about someone 'I have seen someone, she is getting sick. She is seropositive and another person goes and spreads the gossip on"

Obstetric Gynecology Resident



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Health Workers Feel They Have a Right to Know the HIV Status of all Their Patients

"I don't know their HIV status. So to me I'm facing people whom I regard positive until I prove are HIV negative"

Obstetric Gynecology Trainer



"The status of the patients, I think we have the right to know so that we can be more cautious during the procedure"

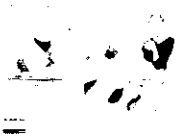
Surgical Resident

© RW 2002 Survey 24.2

Health Workers Feel They Have a Right to Know the HIV Status of all Their Patients (2)

"I don't want to be taking care of a patient and putting myself at risk; so for that matter if you don't know then all of us will die of HIV AIDS. So, it's important for us to know; at least to take the precautions as far as transmission is concerned"

Internist trainer



© RW 2002 Survey 24.2

Doctors Fear that Accidental Needle Pricks or Exposure to Body Fluids Pose a Risk of Infection

“Even taking blood . . . I think among staffs, we also fear . . . I mean a lot of people do fear about HIV”

Psychiatry Resident

“We take care but accidents do happen and we are concerned that we put our life in danger”.

Obstetric Gynecology Resident



ICRW 2002
Tanzania Survey

Health Workers Fear that Their Community Will View them as Immoral if They Become Infected at Work

Health workers do not tell their partners about needle prick accidents because they fear their partner will suspect they have been unfaithful.

“When you get the disease the first thing people see is that you were promiscuous. They don’t think about you getting it in the (operating) theatre or such things.”

Obstetric/Gynecology Resident



ICRW 2002
Tanzania Survey

Because of Fear and Stigmatization, Health Workers Treat HIV+ Patients Poorly

Health workers acknowledge that PLWHA deserve compassionate care, but believe they are not ‘normal’ patients. They require extra care and pose a threat of infection.

The care they provide PLWHA is accompanied by stigma and less aggressive treatment of their illnesses

AIDS Attacks the Body

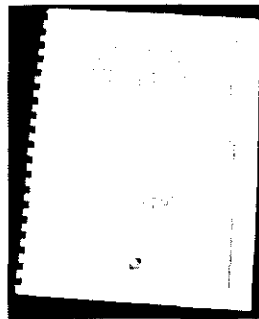
Prejudice Attacks the Spirit

One is caused by virus
One is caused by ignorance.

BOTH CAN KILL

ICRW 2002
Tanzania Survey

Why Target Infection Prevention (Control) in Health Workplaces?



Why Target Infection Prevention (Control) in Health Workplaces?

WHO estimates that of the 12 billion injections administered each year for vaccination and curative purposes, unsafe injections lead to:

- 8-16 million Hepatitis B cases
- 2-4.5 million Hepatitis C cases
- 75,000-150,000 new cases of HIV infection

Why Target Infection Prevention (Control) in Health Workplaces? (2)

Rates of iatrogenic transmission of HIV are not well studied. Evidence is accumulating that it is high and is seriously under-estimated.

African studies report unexplained high rates of HIV incidence during antenatal and postpartum periods and HIV- children with negative mothers*

*Gisselquist D. et al. *British Medical Journal* 324:235, January 2002

Why Integrate HIV/AIDS Stigma and Discrimination and Infection Control Training?

- Fear of HIV infection drives stigma and discrimination by health workers
- Health workers' fears are due largely to ignorance of standard infection control precautions
- Infection Control training is 'standard medical practice', is non-controversial and is well accepted

Why Integrate HIV/AIDS Stigma and Discrimination and Infection Control Training? (2)

- The desire to avoid HIV infection is a powerful motivator to practice consistently standard Infection Control precautions
- Once HCWs' fears are reduced, they are able to understand and to address rationally issues regarding HIV stigma and discrimination

EngenderHealth's HIV-Stigma / Infection Prevention Curriculum: Content

- Values clarification concerning HIV/AIDS
- HIV- related Stigma and Discrimination
- Clients' rights to information, access, informed choice, safety, privacy, confidentiality, dignity, comfort, and continuity of care
- Health care workers' rights and needs for job safety

**EngenderHealth's HIV-stigma /
Infection Prevention Curriculum:
Content (2)**

- Standard infection control practices (universal precautions)
- Post-exposure care including antiretroviral prophylaxis
- HIV testing: ethics, informed choice, technical procedures, interpretation of results.
- Action planning

**EngenderHealth's HIV-Stigma /
Infection Prevention Curriculum:
Training Approach**

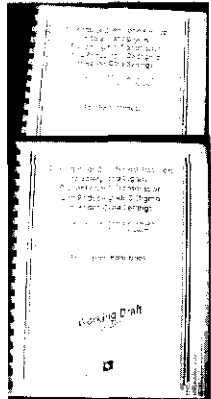
- 5 day course
- On-site training for staff at all levels from all departments
- Participatory learning
- Focus on the clients' rights and staff's needs

**EngenderHealth's HIV-Stigma /
Infection Prevention Curriculum:
Training Approach (2)**

- Don't shy away from controversial issues
- Empower staff to address problems
- Action planning to address infection control, stigma and discrimination specific to own workplace
- Focus on identifying practical solutions that can be implemented with existing resources

**Integrated HIV
Stigma /
Discrimination and
Infection Control
Training**

**Does it Work?
Results of
Curriculum Field
Testing in Nigeria**



**Changes in Participants' Beliefs
and Attitudes**

- In course pre-test, 60% participants believed that HIV+ patients should not be treated in the same area as other patients; in course post-test, only 5% believed this.
- In course pre-test, 65% participants believed that HIV+ health workers should not be allowed to continue to provide services; in course post-test, only 15% believed this.

**Changes in Participants' Beliefs
and Attitudes (2)**

- In course pre-test, 43% participants were comfortable assisting or being assisted by a HIV+ colleague; in course post-test 100% reported feeling comfortable.
- In course pre-test, 75% participants reported feeling comfortable providing health services HIV+ positive clients; in the post-test, 100% reported feeling comfortable.

Participants' Comments

"I used to be fearful about sending my daughters to boarding school because of fear of the possibility of getting infected with the HIV virus from using the same toilet facilities- now I know better."

Nurse

"I once forced a patient to undergo a HIV screening test when I accidentally pricked myself with a needle. I never considered the fact that clients have rights and that I needed to have their consent before screening."

Physician

Participants' Comments (2)

"I was afraid of getting close to a HIV positive person because of fear of being infected. There is no reason for that any more."

Hospital Secretary

"I worked in a private clinic and I once suspected a client of being HIV positive because of what he looked like. I went straight to the doctor and told him not to send the client to the laboratory because I would not attend to him. I even made my suspicions known to other laboratory staff. The patient left the hospital because of my stance. I shouldn't have done all that I did."

Laboratory Scientist

Examples of Practical Actions in Participants' Action Plans

- Convene infection control committee involving staff from all departments
- Organize regular in-hospital seminars on HIV AIDS and infection control standard precautions for health care staff
- Create a system to ensure consistent supplies of cleaning brushes, utility gloves and disinfectants

Examples of Practical Actions in Participants' Action Plans (2)

- Develop a system for safe disposal of sharps and other waste
- Put up infection control wall charts in work areas
- Design and distribute protocol for post exposure care including post exposure prophylaxis

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Exercise 1: HIV and AIDS Values Clarification

Purpose:

- To explore participants' attitudes and values about a range of potentially sensitive issues regarding HIV and AIDS.
- To develop an understanding of and respect for the diversity of opinions within the group
- To recognize and become aware of our own attitudes regarding HIV and AIDS and to remain neutral when working with clients.

Sample Values Questions

- Health staff should routinely be tested for HIV as a means to prevent staff from infecting clients.
- Health staff should have the right to refuse to provide services if materials they need to apply standard precautions are not available.
- A HIV- woman should not be allowed to have a baby.
- A HIV+ woman who becomes pregnant should be encouraged to have an abortion.

Sample Values Questions (2)

- If a provider is afraid of getting HIV from a patient, s/he should have the right not to work with that patient.
- A HIV+ health worker should not be allowed to treat patients.
- Clients have a right to know if a health worker is HIV+.
- Health workers have a right to know if a client is HIV+.

Exercise 2: Standard Precautions in Health Care Settings and in Home

Purpose:

- To provide participants with guidance regarding the principles and practices of standard precautions to prevent HIV transmission in health care and home care settings.
- To support participants' critical thinking in implementing standard precautions where resources are scarce.

Small Group Discussions

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Hand washing• Gloves• Eye protection• Protective clothing• Instrument processing• Handling sharps• Environmental cleanliness & waste disposal• Handling and processing linen | <p><u>Health care settings</u> <u>Home care settings</u></p> <ul style="list-style-type: none">• How does it protect against HIV infection?• What is the proper standard precaution procedure?• What are the challenges to implementing proper procedures and how can we overcome them? |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Sample Case Study

You are the community nurse visiting Mrs. Y, a mother of 4 who has just delivered a baby at home. Mrs. Y's clothing is very bloody indicating active bleeding. You don't have any more sterile gloves in your bag, but you have disposable gloves.

In managing this situation to provide necessary treatment and to protect yourself and Mrs. Y from a blood-borne infection:

1. What would be the ideal practice?
2. What is the minimum you should do?

Lessons Learned

- Health workers share the same misperceptions and fears about the modes and risks of HIV transmission as the general public.
- Health workers frequently over estimate their personal risk of becoming infected at work, but seriously underestimate the risk of accidentally infecting clients through poor infection control practices.
- Integrating HIV stigma/discrimination with infection control training is an appropriate and effective method for reducing both HIV transmission and HIV-related stigma and discrimination in health care settings

Lessons Learned (2)

- Significant changes of health staff's attitudes towards HIV+ clients and colleagues can be achieved through a short participative training course.
- Helping health workers to reflect on how they would want to be treated if they were HIV+ helps them to understand issues regarding informed choice, voluntary HIV testing, confidentiality, and protection of clients' rights.
- Facilitators must be skilled and experienced in facilitating discussion of highly sensitive issues. They must keep the discussions focused on issues, and must be able to manage participants who become emotionally distressed.

Lessons Learned (3)

- Action Planning is an essential training component. It assists health workers to apply what they have learnt in their every day work. Action planning can be a powerful motivator to change behavior, but only if the plans are followed up to confirm that they have been implemented.
- Continuing post training support is essential to ensure that the staff's changed attitudes are sustained, and to ensure that the new attitudes are reflected in improved clinical practice.

Using Operational Standards to Enhance Transfer of Learning in Malawi

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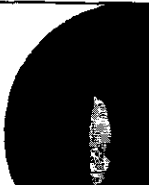
Ministry of Health and Population of Malawi
PQI process in Infection Prevention - Results in % of baseline (March-July 2002) and
first internal monitoring (December 2002) in seven hospitals

Areas	Chikwawa DH		St. John's H (*)		LCH		Mzuzu CH (*)		QECH (*)		Zomba CH		Likuni H	
CSSD and OR Isolation Systems	8.3	43.2	37.5	29.2	4.2	67.6	37.5	75.0	12.5	16.7	29.1	29.7	31.8	75.7
Labor and Delivery	0.0	18.2	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	27.3	0.0	27.3
C, S, M Wards	8.0	22.2	8.3	16.7	25.0	16.7	25.0	66.6	25.0	25.0	33.3	66.7	16.6	66.7
MCH/FP	7.6	36.4	15.4	40.0	30.7	50.0	7.14	6.66	7.1	0.0	0.0	27.3	35.7	36.4
Dental	0.0	18.2	18.2	9.1	16.6	50.0	58.3	25.0	58.3	33.3	16.6	36.4	54.5	57.9
Laboratory	0.0	35.7	13.0	10.0	20.0	-	20.0	40.0	20.0	70.0	0.0	50.0	20.0	57.0
Postmortem	8.0	52.9	25.0	33.3	16.6	52.9	8.0	58.3	8.0	41.7	25.0	47.1	25.0	52.0
Administrative	0.0	16.7	0.0	-	0.0	25.0	0.0	0.0	0.0	0.0	0.0	25.0	N.O.	25.0
Patient/Client Education	0.0	0.0	0.0	0.0	25.0	16.7	0.0	25.0	0.0	25.0	0.0	0.0	0.0	33.3
Food Preparation	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	25.0	25.0	0.0	0.0	0.0	25.0
Laundry	14.0	42.9	0.0	42.9	14.2	57.1	28.5	85.7	28.5	42.9	14.2	28.6	42.8	85.7
Waste Disposal	16.3	33.3	16.7	66.7	83.3	100.0	33.3	83.3	33.3	33.3	33.3	50.0	33.3	83.3
Total	0.0	40.0	66.7	50.0	25.0	40.0	0.0	25.0	0.0	50.0	0.0	0.0	75.0	60.0
	6.6	32.0	21.7	26.5	19.3	46.6	19.1	46.6	19.1	27.6	16.6	34.0	30.0	53.5

(*) Used the first version of the tool.

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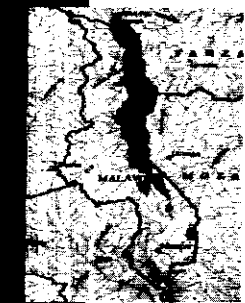
Using Operational Standards to Enhance Transfer of Learning in Malawi



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Learning Objectives



- Describe the performance and quality improvement process being implemented in Malawi
- Describe how the infection prevention operational standards are being used as a learning tool to ensure transfer of learning at providers' sites
- Determine the applicability of the results of this experience to other content areas and other settings

2

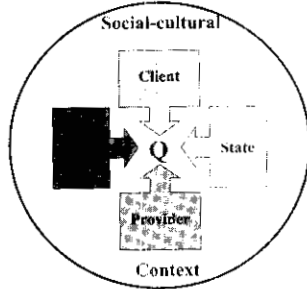
What Do We Understand for Quality?

The most desirable outcome of a health intervention in terms of

- Maximum well-being for the client, considering Risks and benefits Gains and losses
- ✓ Provider satisfaction
- ✓ Efficiency
- Individual and social balance

3

Quality Framework



4

Some Features of Performance Improvement # 1

- ✓ Focuses on what people and organizations need to do to achieve results
- ✓ Has a proactive approach: the first step is the establishment of the desired level of performance, gaps are identified based on the desired performance; does not focus on problems
- ✓ Considers the performer in her/his specific work setting, the conditions under which performance occurs

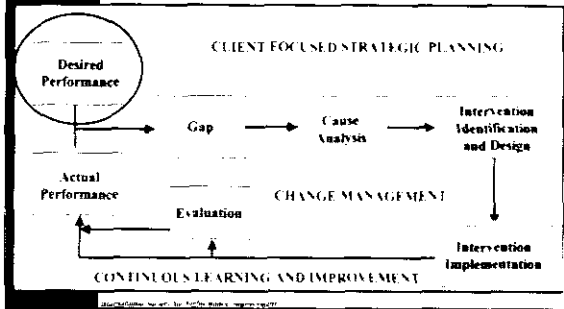
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Some Features of Performance Improvement # 2

- ✓ Uses a systemic approach for the identification of causes of performance gaps (and interventions)
- ✓ Considers several levels of performance: individual, organizational processes, and the organization as a whole: alignment
- ✓ Follows a simple, sequential and logical process

6

Performance and Quality Improvement Model

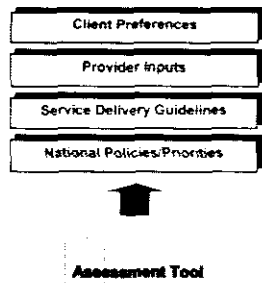


"If you don't know where you are going, you will wind up somewhere else."

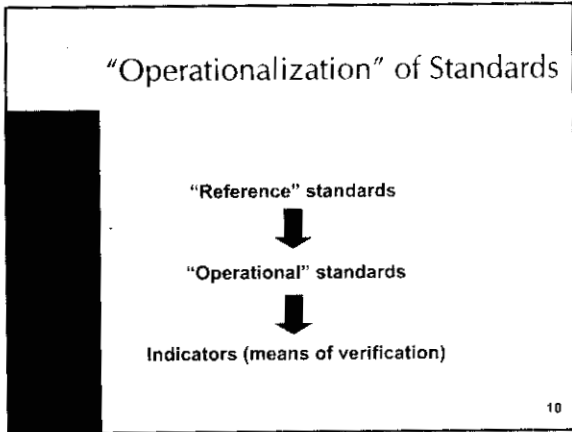
Yogi Berra

8

Desired Performance

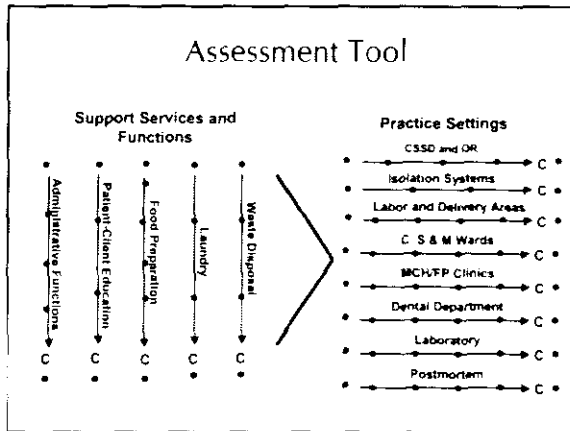


9



- ### "Operationalization" of Standards
- ✓ Are consistent with reference standards
 - ✓ Maps the processes that an organization does
 - ✓ Integrate all the different aspects of provision of care
 - ✓ Link to indicators that are:
 - observable
 - objectively verifiable
 - practical
- 11

- ### What is Process Mapping?
- ✓ Process maps are diagrams that show in varying levels of detail – what an organization does and how it delivers services
 - ✓ The mapping shows the major processes in place, their key activities, the sequencing of these activities, the inputs required and the outputs produced
 - ✓ Process maps are way of ensuring that the activities making up a particular process are properly understood and managed in order to deliver appropriate customer service
- 12



- ### Assessment Tool
- ✓ Lists key quality criteria organized by area of services to clients and support functions
 - ✓ Each criterion has easily observable verification items with "yes", "no" or "not applicable" options
 - ✓ Objectively establishes the desired level of performance
 - ✓ Measures actual performance
 - ✓ Helps identify performance gaps
- 14

Assessment Tool

Area: CSSD and Operation Room			
Criteria	Verification Means	Y, N, N/A	Comments
1. The cleaning equipment is decontaminated, cleaned and dried before reuse or storage according to the standards	Observe if the mops, buckets, brushes and cleaning cloths are: <ul style="list-style-type: none"> • Decontaminated by soaking for 10 minutes in 0.3% chlorine solution or other approved disinfectant • Washed in detergent and water • Rinsed in clean water • Dried completely before reuse or storage 	_____ _____ _____ _____	

Considerations to Group Criteria in Areas

- ✓ Are part of the same process of provision of care
- ✓ Are performed by the same people
- ✓ Happen at the same place
- ✓ *Require the same materials*
- ✓ Facilitate decision making

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Assessment Tool Outline: 203 Criteria

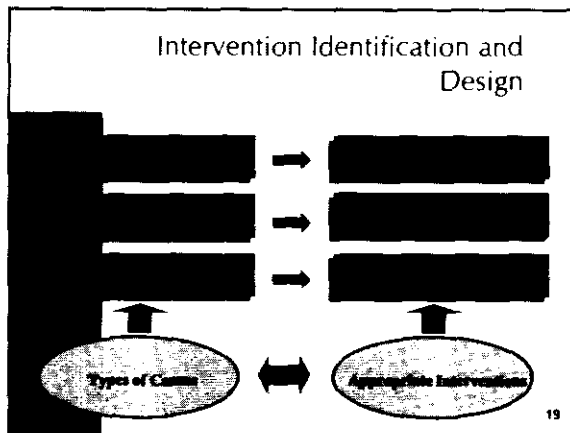
PRACTICE SETTINGS:		SUPPORT SERVICES AND FUNCTIONS:	
CSSD and OR	37	Administrative Functions	06
Isolation Systems	11	Patient-Client Education	04
Labor and Delivery Areas	18	Food Preparation	07
Casualty, Surgical and Medical Wards	44	Laundry	06
MCH/FP Clinics	22	Waste Disposal	05
Dental Department	14		
Laboratory	17		
Postmortem Care	12		
TOTAL: 175 CRITERIA		TOTAL: 28 CRITERIA	

Why Providers Do Not Perform Well?

Providers:

- Do not know → Lack of information, knowledge/skills
- Are not enabled → Inadequate resources, capacity
- Do not want → Lack of motivation/incentives

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- ### The Interventions Can Be...
- ✓ Rapid interventions
 - ✓ Interventions based on local resources
 - ✓ Interventions that require external support
- 20

- ### Rapid Interventions
- Some causes of gaps are so evident that they do not require an elaborated cause analysis because the appropriate intervention is obvious
- Rapid interventions:
- ✓ Produce immediate results
 - ✓ Produce a sense of empowerment
 - ✓ Create momentum for change
 - ✓ Increase change management skills
- 21

Reviewing...

...the transfer of learning process is an interrelated series of tasks performed by supervisors, trainers, learners, co-workers and sometimes other actors before, during and after a learning intervention in order to improve job performance.

22

Implementation Matrix

LEVEL	TOOL	PROCESS	MOTIVATING FACTORS
Individual	Assessment tool	Self-learning	Satisfaction, professional development
Team	Assessment tool, protocols, SDGs	Teamwork, on-the-job training (OJT)	Better work environment, support
Facility Manager	Assessment tool	Feedback, monitoring	Better service recognition
Client	Ext interviews, suggestions box, IEC	Feedback, informed demand	Better care
Community	Assessment tool, IEC	Community participation	Better care
Health System	Assessment tool	Feedback, support, evaluation	Better health results and outcomes

How the Operational Standards Have Been Used to Enhance TOL?

- The assessment tool:
 - Identifies the desired performance
 - Measures the actual performance (self, peer, external)
 - Identifies performance gaps and causes
 - Serves as a job-aid, learning tool
 - Helps to define, design or adapted the learning interventions based on the performance gaps and site characteristics
 - Assures that other non-learning interventions needed are being planned and/or implemented
 - Monitors progress
 - It is a measurement-based management tool

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Malawi Results

25

**Benchmarking and
Networking**

26

Benchmarking

It usually encompasses:

- ✓ Identifying gaps in performance
- ✓ Comparing aspects of performance with best practitioners
- ✓ Seeking fresh approaches to bring about improvements in performance
- ✓ Following through with implementing improvements
- ✓ Following up by monitoring progress and reviewing the benefits

You only can benchmark when you know your gaps and who is doing better than you the assessment tool is the key

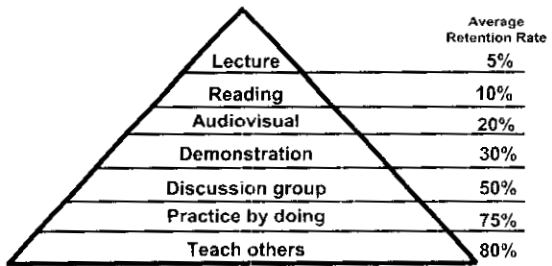
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Networking

Working interconnected with
other partners

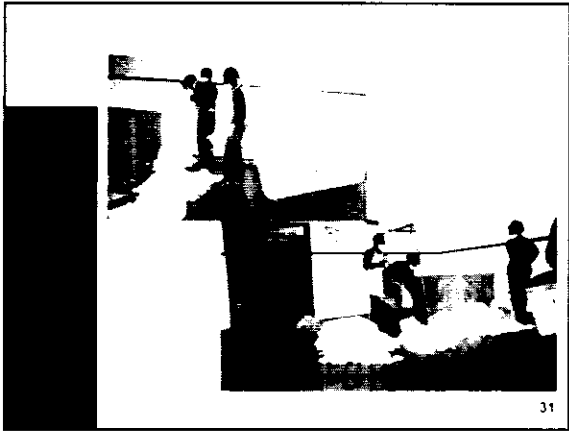
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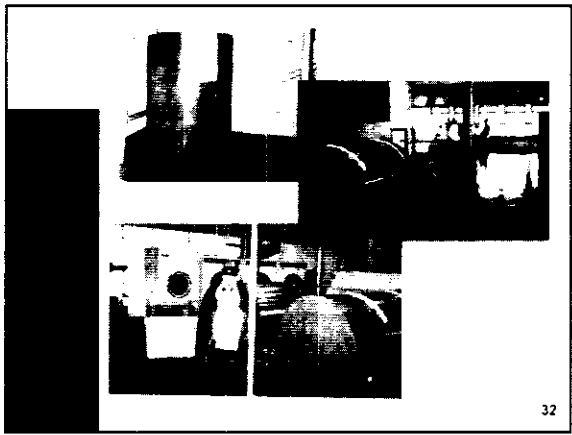
The Learning Pyramid

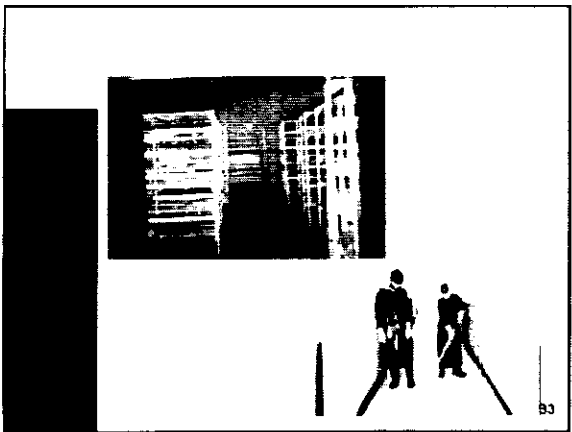


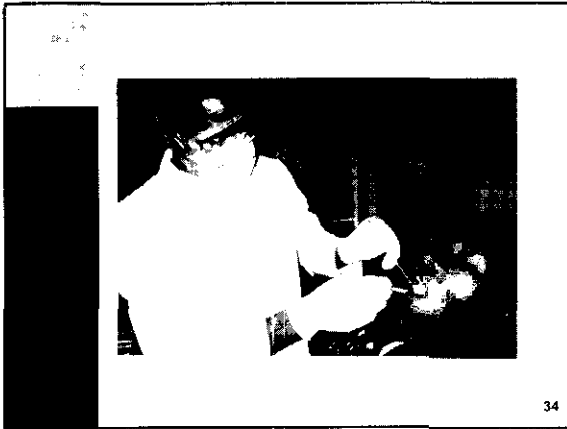
National Training Laboratories, Bethel, Maine, USA

30









Conclusion #1

- When learning interventions are part of a more comprehensive approach such as the PQI process, it is easier:
 - to confirm and supplement the performance need
 - to customize the learning intervention
 - to link learning interventions with non-learning interventions

Conclusion #2

“When you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you can not express it in numbers, your knowledge is of a meager and unsatisfactory kind.”

Lord Kelvin

Challenges

- Most service providers and/or trainers are not instructional designers, so it is not always easy for them:
 - to design and or to adapt a learning intervention
 - to customize a learning intervention

Are there any questions or comments?
Let's now work in small groups...

37

Training in Integrated Maternity/Postabortion Care: in Kenya

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Background

More than 15 years after the international Safe Motherhood Initiative (SMI) launch in Nairobi, Kenya and nine years after the International Conference on Population and Development (ICPD) in Cairo, little improvement has been seen in the area of maternal mortality in Africa. Worldwide there are nearly 600,000 maternal deaths each year. Almost all, - 99 per cent - occur in developing countries, with sub-Saharan Africa accounting for the majority.

In Kenya, the exact magnitude of maternal morbidity and mortality cannot be determined but annual estimates are alarming: 4,500 maternal deaths and over 500,000 women with obstetric complications. World Health Organization (WHO 1997) estimates that in Kenya the lifetime risk of dying from pregnancy or childbirth is one in twenty. Maternal-mortality figures (KDHS 1998) stood at 590 deaths per 100,000 live births. WHO estimates puts the MMR in Kenya at 650 per 100,000 live births. The causes of maternal morbidity and mortality in Kenya show a fairly typical distribution as regards direct obstetric complications and deaths, with hemorrhage, sepsis, pre-eclampsia eclampsia, ruptured uterus and complications of induced abortion accounting for the majority of these complications and deaths. While nearly all of the leading causes of maternal mortality are not predictable they may be preventable. Death from complications of abortion is most easily preventable, with trained providers and early, appropriate care. Many of these maternal deaths are due to delays. These include delays in: recognizing that a problem exists; decision making by women or their families to address the problem; difficulties delay in reaching a hospital or clinic and the lack of appropriate care at the facility once reached. These delays are especially critical for women who live in rural areas, where the facility may be far away, or offers only limited emergency obstetric care (EmOC). Such time and service delays ultimately mean the difference between survival and death for women in many areas of Kenya. This loss of life is felt, not only by the affected individuals or families, rather it is a loss to the nation as women make a crucial contribution to the country's socio-economic development. It would not be an over-statement to say that for the majority of Kenyan women, the provision of quality maternity care makes the difference between life and death. Realization of this difference can only be achieved through the management of obstetric complications through the provision of accessible, affordable, safe and clean pregnancy-related care.

While internationally, WHO estimates that unsafe abortion accounts for 13% maternal mortality, 35% of maternal mortality in Kenya is due to abortion complications (KDHS 1998). Furthermore, a Swedish SIDA assessment report (1998) indicated that abortion accounts for between 13-52 % of gynecological admissions in rural hospitals and 60% at the Kenyatta National Hospital (the national referral hospital). Complications of abortion are often given scant attention in international safe motherhood programs: usually this major cause of maternal mortality is only addressed as management of bleeding in the first trimester. *Comprehensive postabortion care* package of services includes:

- *Community and service provider partnerships;*
- *Counseling* to identify and respond to women's emotional and physical health needs and other concerns;
- *Treatment of incomplete and unsafe abortion;*
- *Contraceptive and family planning services* and
- *Reproductive and other health services* that are preferably provided on-site or via referrals to other accessible facilities in providers' networks.

Although Kenya has experienced a dramatic decline in fertility over the last 20 years, with a total fertility rate falling from 8.1 in 1977 to 4.7 and contraceptive prevalence rate (CPR) for currently married women using modern contraceptives being 32% in 1998, there are some parts of the country with fertility well above the national average. Some parts of the country and special groups such as the unmarried including youth adolescents also experience a high unmet need for family planning. The availability and uptake of effective contraceptive methods not only prevents unwanted pregnancies which place women who resort to unsafe induced abortion at a particular risk, but also influences timing and spacing of pregnancies.

The government of Kenya's National Strategy for Reproductive Health has set an agenda for reduction of maternal mortality and morbidity over the next decade. This is in line with ICPD (Cairo, 1994) goals and recommendations. The Ministry of Health has articulated the reproductive health program areas that need to be addressed in order to achieve their goals. These include Safe Motherhood (antenatal care, clean and safe delivery, post-natal care and emergency obstetric care), family planning, postabortion care and maternal nutrition among others. Activities proposed to realize the stated objectives include community mobilization; establishment of functional referral systems and strengthening of facilities at all levels.

Project description

To address the needs of Kenyan women, the Kenya Ministry of Health, with technical assistance from EngenderHealth and Ipas with financial support from SIDA Sweden, implemented a ten-month project. The aim of the project was to improve the quality of essential obstetric care (EsOC) including postabortion care (PAC) services (*EsOC functions covered during training are marked by ** on the table one below*) in four district hospitals and one rural training health center in Kenya.

Table 1: Essential and emergency obstetric care and functions and neonatal special care

Intervention	Essential Obstetric Functions(EOF)	Essential Obstetric Care (EsOC)	Emergency Obstetric Care(EmOC)	Neonatal Special Care (NSC)
Maternal waiting home	Y	Y	N	N
Partograph **	Y	Y	N	N
Blood transfusion**	Y	Y	Y	N
IV transfusion **	Y	Y	Y	N
Antibiotics/oxytocic **	Y	Y	Y	Antibiotics
Pre-eclampsia management **	Y	Y	N	N
Eclampsia management **	Y	N	Y	N
Cesarean section**	Y	Y	Y	Y
Ventous/forceps **	Y	Y	Y	N
Manual removal of placenta. **	Y	Y	Y	N
Evacuation of retained products of conceptus **	Y	Y	Y	N
Suturing	Y	N	Y	N
Laparotomy	Y	N	Y	N
Resuscitation **	Y	Y	Y	Y
Family planning **	Y	N	N	N
Breastfeeding **	Y	N	N	Y
Warming (Rooming-in)**	Y	N	N	Y
Hygiene **	N	N	N	Y
Neonatal eye care **	N	N	N	Y

These essential services were either not being offered in these districts, or were of poor quality.

The project objectives were as follows:

1. To support ministry of health (MoH) in improving the quality of pregnancy monitoring, delivery, postabortion care, family planning and other selected reproductive health services.
2. To strengthen safe management of pregnancy, active management of labor and incomplete abortion in each hospital by supporting training.
3. Provide the hospitals with essential start-up EsOC including PAC equipment and supplies for providing these services during the project period.
4. Support minor renovations for PAC service areas in the health facilities.
5. To establish RH, post-delivery and postabortion family planning including emergency contraception (ECPs) counseling and service provision at all the project sites and make effort to link all incomplete abortion patients to these services.

Two Provincial Health Management Teams (PHMT- Rift Valley & Western provinces) were oriented on the rationale and benefits of integrated quality EsOC including PAC to get their commitment and buy-in and their role in involving interested district hospitals in their provinces by formally applying to be included in the project. Due to financial limitations only four district

hospitals and one Rural Training Health Center out of those who applied were purposefully selected and involved among the SIDA Sweden funded districts. The District Health Management Teams (DHMTs) were then oriented on the concept of integrated quality EsOC including PAC to get their buy-in and commitment to implement in the district hospital as a referral center and solicit funds for extending the same to the secondary (health centers) and primary (dispensary) health facilities in future. After orientation, the DHMTs identified their burning EsOC including PAC needs, developed action plans, which they submitted for assistance in implementation. Baseline data was then collected from the sites in May 22-30, 2000, analyzed and findings shared with PHMTs and DHMTs. The implementation started in September 2000 by EngenderHealth and Ipas training of Gynecologists obstetricians and nurse officer teams (*MOH Regional Reproductive Health Supervisory teams*) as trainers in EsOC including PAC and quality improvement. The regional trainers with technical assistance from EngenderHealth and Ipas then trained the other service providers as shown on table two below:

Table 2: Summary of initial training

	TRAINING ACTIVITY	DOCTORS	CLINICAL OFFICERS	NURSES	ADMINISTRATORS	OTHERS	TOTAL
1	Orientation of provincial health management teams	4	0	4	All were administrators		8
2	Orientation of district health management teams hospital management teams	4	6	20	21	4	55
3	Training of regional reproductive health coordinators as PAC trainers	4	0	3	0		7
4	Training of district hospital service providers in PAC	2	3	12	0		17
5	Training of district hospital health service providers in EsOC, maternity COPE, Child COPE, General COPE, Infection prevention (IP) and cost analysis (CAT)	2	6	44	12	62	126
6	Training of district health service providers in RH, family planning (FP) including emergency contraception and PAC counseling	2	3	14	0		19
	TOTAL	18	18	97	41	66	240

The Nandi (Kapsabet) district personnel trained the Mosoriot health center service providers with technical assistance from MoH regional reproductive health supervisors and EngenderHealth. Three months after the trainees had practiced and acquired proficiency in new skills, the sites had Whole Site Training, by a combination of attaching a trainer in EsOC and quality improvement tools to each hospital for five working days and using the centrally trained personnel as trainers. Facilitative supervision and certification of service providers on achieving proficiency was carried out at regional level by the MoH regional reproductive health supervisors trainers, and at national level by MoH Division of Reproductive Health (DRH), EngenderHealth and Ipas.

Each site was assisted to carry out minor renovations to create PAC rooms from identified spaces and provided with start-up EsOC including PAC equipment and expendable supplies. Four follow-ups were carried out during the life of the project and a summative evaluation was carried out in March 2002 after the end of implementation.

Data and methods

The report is based on data collected from five health facilities including four District Hospitals and one Health Center. The facilities visited were Busia, Kapsabet, Kajiado, Koibatek district hospitals and Mosoriot rural health training center. Qualitative data was collected using semi-structured interviews with 37 DHMT members, 53 service providers and other health personnel who had been exposed to, or knowledgeable about SIDA EsOC including PAC project and 3 clients/patients. The

DHMTs were interviewed as a group and service providers and clients/patients individually. The data was then manually analyzed. The breakdown of the DHMT respondents was as listed in table 3:

Table 3: Comparison of health facility management respondents

Cadre of respondents	Number
Medical officers	3
Hospital matron/deputy matron in-charges	5
District public health nurses	4
District public health officers	3
District clinical officer	1
Health administrator	1
Registered community health nurses	3
Laboratory in-charges/technologists	2
District nutrition officer	2
Physiotherapist	1
Hospital personnel officer	1
Nursing officer in-charge of MCII/FP clinic	1
District health education officer	1
Clinical officer for TB & leprosy	1
Radiographer	1
Supplies officer	1
Human resource and information technologist	2
Medical engineering technologist	1
Dental technologist	1
Total:	37

Limitation of the evaluation

- Short implementation period
- Summative evaluation mainly qualitative but backed up by baseline survey and quantitative data collected during the project's lifetime.
- Poor record keeping at sites
- Mosoriot rural training health center management constraint which were beyond the project control.

STUDY FINDINGS

A. HEALTH FACILITY MANAGEMENT

During the visit three medical officers, deputy medical officer and one clinical officer were in-charge of their respective health facilities.

One of the questions asked in the interview was whether or not the EsOC including PAC had helped the facility and district. All the 37 respondents reported that SIDA EsOC including PAC had helped their facilities. The most reported benefits of EsOC including PAC to the facilities include the fact that "it has helped reduce the patients waiting time" and as a result the community is happy. The respondents also indicated "it was an update, which awakened all personnel on the right procedures of handling pregnant mothers". Other notable benefits quoted by managers were:

- "The project has facilitated proper/effective utilization of available health facilities, human resources and reduced client opportunity costs".
- "The project has helped: Since referrals from other health facilities are handled well unlike in the past".
- "Nurses are providing comprehensive PAC immediately on patient's arrival without delay, compared to waiting in the ward for two to even three days as used to be the case in the past".
- "Complications during labor are detected early and action taken appropriately".

However, in some facilities it was reported that all the trained nurses in the hospital had been reshuffled, but arrangements had been put in place for those who were trained to train others on-job before they moved to their new stations.

In one of the facility, it was reported that PAC was doing well and on average, ten clients were served per month. The respondents reported that patients who came from all over the district were treated within one hour of arrival whether day time or night and travel back home the same day unless there were other complications, unlike in the past when they used to be kept for up to three days. It was further reported that infection prevention (IP) was working well in maternity, PAC room and MCH FP clinic. However, the hospital management had not managed to buy IP plastic buckets (at least 3 per ward) for the rest of the hospital wards, mainly due to lack of funds. They also commented on the need to put in place mechanism for replenishing plastic buckets every six months.

In another facility, it was reported that COPE quality improvement tool had helped facilitate the posting of more nurses to the maternity, at least two per shift. However, some times the nurses were not able to chart the partograph, especially when there were six to seven patients in labor to be monitored. In another facility, it was reported that the service providers used the skills they learnt as long as the supplies were available. When the supplies run out, it took more than procuring it to motivate the service providers to revert back to the newly acquired skills.

The respondents from Kapsabet hospital reported that EsOC including PAC project had helped to improve management of maternity cases, provision of prompt services to postabortion clients, improved and reduced time-span for handling of obstetric and postabortion emergencies as well as reduced maternal mortality.

With regard to the coordination of EsOC including PAC activities in the facilities, the study established that PAC was coordinated by two clinical officers and three nursing officer while EsOC was coordinated by one matron and three nursing officers. It was further established that all the coordinators had been trained.

Management utilization of trained service providers

It was established that the four health workers from Kajiado who were trained in RH counseling were not working well due to the initial poor trainee selection. Those selected were not interested in reproductive health counseling and hence were poorly motivated. The study revealed that five of trained health workers were deployed in general ward, one per ward. Twelve personnel who were trained on PAC were in MCH FP while two who were trained in PAC were in OPD. One trained health worker was deployed in medical ward while 12 were in areas where they provided EsOC.

One of the issues that the study sort to establish was whether or not members of the Health Management Team were well oriented in comprehensive PAC and Essential Obstetric Care. The study revealed that all the members had an idea. It was reported that there is continuing education forum every Thursdays where EsOC including PAC had been presented several times. However, due to lack of interest by some staff and tendency of looking at activities in the hospital in terms of departments, some members may have forgotten the EsOC including PAC sessions. However, all the health workers in all the health facilities knew what comprehensive PAC was, including knowledge of who to call in emergency.

Sustainability and maintenance of equipment and supplies

The finding revealed that PAC clients pay fees, however, it was not a must that they pay before the services (See details on table 4 below). Responses to the question on whether PAC clients had to buy any drugs or supplies before they were attended revealed that in most cases they do not buy since drugs was bought with cost sharing money. However, there are times when funds are not adequate, during such a time clients buy JIK (Chlorine solution) and a few other expendable supplies such as ergometrin. It was reported that this situation may change and the clients may buy more drugs soon since STI Kit, which used to supplement drugs given to clients would not be available any more.

TABLE 4: Fee structure in different health facilities

Facility	Normal delivery	Daily ward accommodation	Caesarian section (C/S)	PAC
Kapsabet	Kshs 400 (US\$ 5.13)	Kshs 100 (US\$ 1.28)	Kshs 2500 (US\$ 32.05)	Kshs 500 (US\$ 6.4)
Koibatek	Kshs 500 (US\$ 6.4)	Kshs 100 (US\$ 1.28)	Kshs 2000 (US\$ 25.64)	Kshs 500 (US\$ 6.4)
Busia	Kshs 120 (US\$ 1.5)	Kshs 50 (US\$ 0.64)	Kshs 1000 (US\$ 12.8)	Kshs 500 (US\$ 6.4)
Kajiado	Kshs 200 (US\$ 2.6)	Kshs 40 (US\$ 0.5)	Kshs 1000 (US\$ 12.8)	Kshs 500 (US\$ 6.4)
Mosoriot H/C	Kshs 230 (US\$ 2.9)		Not done on site	Kshs 500 (US\$ 6.4). However, no universally agreed fee.

The respondents reported that maternity clients paid fee (See details on table 4 above). In three of the five facilities, it was reported that the maternity clients bought drugs or supplies before they were attended to. In two facilities it was reported that they in most cases did not buy supplies. However, they bought gloves and cotton wool when the hospital ran short of supplies. In some facilities, it was reported that when supplies and drugs are not provided, patients avoid the hospital.

It was reported that shortage of drugs and some expendable supplies arise as a result of shortcoming from Kenya Medical Supplies Agency (KEMSA) which had become quite unpredictable. One respondent reported that when there were no drugs in the hospital, fewer patients turned up, hence less money was collected as a result of reduction in number of in and out- patients.

It was also reported in some facilities that, in practice, funds allocated for maternity and theatre by District Health Management Board (DHMB) was sometimes diverted to other causes deemed to be of higher priority by the hospital authorities. The finding revealed that the money paid by clients was used by management to improve services through hiring of extra personnel/casuals including watchmen who had helped in reducing theft of drugs, buying of fuel for facilities' transport, purchase of expendable and laboratory supplies. However, since the introduction of the project, the management had allowed the maternity, theater and gynecology units to keep 75% of the funds they collect, which in the past was "stated to be against the national policy", for replenishing the expendable supplies.

Foundations of setting cost sharing fee

Responses to the question on the costing revealed that initially there was no basis for costing and hence costing was done arbitrarily, however, it was usually reviewed upwards at intervals. After the training the cost of different procedures including expendable supplies were assessed and cost analysis done especially for theatre and maternity and findings discussed at the DHMT. Where cost was low, it was passed over to clients. However, where cost was high, it was reduced but cross-subsidized. The final agreed fee was then sent for ratification by DHMB. However, only items that were not supplied by KEMSA were included in the cost presented to the District Health Management Board (DHMB).

Some facilities reported that as an agreed guideline after the Whole-Site-Training including management on EsOC including PAC, 75% of the money collected go back to the unit or department that generated the funds who plans how it should be used. Funds that the unit/department are unable to use are given to non-income generating areas. About 25% of funds collected by each unit are reserved for Primary Health Care (PHC). This was a great change from the past when management maintained that it was a "national policy to send all funds collected to the district treasury" even when the concerned units did not have essential supplies.

Most of the respondents reported that when funds are ploughed back to services, patients were treated quickly because they were not given a list of drugs and supplies to go and buy before they can be attended to, like in the past. Infection prevention was also in place due to availability of supplies and time taken to attend to the patients had been shortened greatly. Kapsabet and Busia had working incinerators, which they did not have before. Mosoriot was building one. Busia hospital management solicited funds from other sources and added to the project to rehabilitate all the water

plumbing system, erect an electric incinerator and strengthen infection prevention within the hospital. As a result, attendance had increased since clients were aware of the current better quality services. In most facilities supplies for emergency was readily available unlike in the past when clients' relatives had to be given a shopping list to go and bring the drugs and supplies before their emergency patients could be attended.

However, despite the fee, the change in quality improvement, though dramatic, the expectation of service providers was not met in some facilities because funds centrally allocated for each health facility was not disbursed regularly anymore. The disbursement was erratic though in the end the total amount was received by the health facility. The bureaucracy in getting the funds allocated involved the provincial medical officer as the AIE holder, who was far away at the provincial office and could not visualize the urgency created by EsOC including PAC patients. It was reported that in most cases, the amount requested for was arbitrarily reduced by 50% and sometimes the funds passed end up in procuring substandard equipment and supplies since the people procuring had no experience in their use. It was also reported that expenditure fluctuated from month to month and average quarterly or annual expenditure was rarely worked out from past experience.

Another area that the study explored was existence of a functional system for replacing the MVA kit when it breaks down. In two out of five facilities, it was reported that facilities had a system in place for replacing MVA kit when it breaks down. Those facilities reported that they had spare MVA kit in store and that they would use cost sharing money collected to replace broken MVA kit. Furthermore the people who were trained had taken ownership and kept asking for any support that they needed to keep the services accessible to clients on demand. Of the three health facilities that did not have a system in-place, one indicated it did not even know where to get the kits in case they intended to replace. However, PAC unit kept 75% of what they collect and could purchase the kit should need arise, once they knew where to get it. The other hospital reported that though Ipas had sent written information on where to source for MVA kits and the cost, the hospital had not established a system for procurement.

The study also sought to establish whether the health facilities had a system in place for repairing or replacing the EsOC equipment provided by the project. The finding revealed that four of the five health facilities had a system in place for replacing the start-up EsOC equipment provided by the project. In one of the facilities, it was reported that the maintenance department was quite good and quite prompt in repairing the broken equipment. The second facility reported that there were full-time qualified paid maintenance personnel, but they were not able to repair equipment in most cases. The third facility reported that the maintenance team were never informed or given equipment manual to familiarize themselves with when new equipment are procured for the hospital and this affected their performance and motivation to work.

Regarding the question on whether or not facility had in place a system for timely replenishment of expendable supplies and drugs, four of the five facilities reported that they had system in place for timely replenishment of expendable supplies and drugs and they rarely had stock outs. However, when stock outs occur they were very brief. They indicated that they had a system for each ward to keep emergency supplies in case of stock outs.

Responses to the question on the average time PAC client took from admission to discharge indicated that they took between 2 and 3 hours from admission to the time when uterine evacuation was carried out, whether day or night, because there were usually some trained personnel on day and night duty. However, when there were no trained personnel on night duty, the trained ones were put on call. In Kapsabet, the PAC clients take one to three hours during daytime, but a bit longer at night but not more than 12 hours.

Strategy for the future

All the five facilities reported they had strategy for EsOC including PAC. They had included training of nurses in the health centers and dispensaries in EsOC including PAC in the 2003 SIDA

funded work-plan. The health facilities had also incorporated training into the DEA funded 2001 to 2004 work plan to train selected health centers in EsOC including PAC between the time the evaluation was conducted and the year 2004. For Kapsabet the health facilities included in the training were Chepterwai, Meteitei, Aldai and one more health center which were the furthest from the district hospital and contributed significantly to late referral of patients in labor. There were also plans in place for on job training of two personnel on PAC every year.

The respondents reported that DHMTs intended to improve the quality of EsOC including PAC at the dispensary level by training nurses at dispensary level in EsOC including PAC. Those nurses trained in EsOC including PAC at the district hospital will be posted to the health centers and those from dispensary will be posted back to the district hospital for OJT. The DHMTs intends to improve the quality of EsOC including PAC by sensitization of the health workers through continuing education on monthly basis.

B. SERVICE PROVIDER

A total of 53 service providers completed the questionnaire and all reported attending the following training: comprehensive PAC 21 providers, EsOC 41, RH counseling 17, IP 47, COPE 37, CAT 34 and CTU 35.

Responses to the question, on when the respondents used their skills last, revealed that some of the respondents had used their skills as recent as the day of the interview. About half had used their skills less than a month ago and 14 reported they had used their skills three months ago. The service providers reported they had trained 283 nurses, nine clinical officers and 67 subordinate staff through on-job training. Other personnel trained included two medical laboratory technologists, two doctors from Moi University and 120 staff from other cadres.

Challenges facing service providers from their own perspective

In responses to the question on the constraints faced by the service providers during their course of providing the service they were trained for, the responses were as follows:

- 37 reported irregular availability of expendable supplies, mainly lack of gluteraldehyde, which had to come from Nairobi.
- 35 faced lack of adequate equipment, which included Spectulum, sponge holding forceps and tenaculum.
- 23 reported lack of information on PAC among the community from the health facility catchment area where most clients are referred from by the dispensaries.
- 21 reported inadequate space for providing services. In Kapsabet, it was reported that PAC room was too small and lacked privacy.
- 17 respondents initially centrally trained reported lack of support from fellow workers before the whole-site-training.
- 11 reported inappropriate space for providing services (Same area for FP & postnatal; Resuscitation and dressing rooms at OPD).
- 10 reported lack of support from supervisors,
- 6 reported frequent posting to areas where they cannot use the skills and
- 6 reported infrequent update.
- 3 reported negative attitude of other service providers to PAC clients especially before whole-site-training.
- 2 had unclear job description

Training benefits to service providers from their own perspective

All service providers indicated that they benefited from training. Above all the respondents reported that they were more motivated and committed to their work than before. Majority reported they acquired new skills and knowledge in the area of reproductive health including infection prevention, MVA procedures, timely management of labor and complications, contraceptive technology and use of partographs among others. Other areas of improvement reported by the service providers include supervision and monitoring, treatment of PAC clients, reduced waiting time for clients and that they

were more effective and efficient in their work and more accurate in providing services to the clients and patients.

Training benefit to the health facility and clients/patients from service providers perspective

The service providers reported that the facilities and the clients had also benefited from the project. Some of the areas the project had helped improve included:

- Reduced patient waiting and staying time and less congestion in the wards.
- Existence of enough trained personnel and consequently reduced workload per service provider.
- Increased numbers of skilled manpower for obstetric emergencies.
- Introduction of the revolving funds to cater for items necessary for management of obstetric emergencies hence there was less stock-out of expendable supplies.
- Reduced stock outs of expendable supplies and ready availability of PAC and EOC equipment as a result of start up supplies and equipment and arrangement to plough back part of funds generated.
- Reduction of abortion related complication due to introduction of PAC services using MVA including timely management.
- Reduction in number of patients being referred to other health facilities.
- The new equipment in maternity labor room had resulted in enough delivery packs including new born and adult suction machine making the work easier and enabling service providers to attend patients on timely manner.
- The health providers had greatly reduced spread of infection thereby reducing the high mortality for both mothers and infants.
- PAC patients did not have to wait for anesthetist. to be given GA, now they were treated under analgesia, which allowed them to go home immediately.
- Client provider relations have improved and this has resulted in increased client morale and satisfaction leading to more clients coming to the facilities.
- The hospital has improved its image due to the quality of care given to PAC and EsOC clients as a result of training and provision of expendable supplies.

Suggestions by service providers on further improvement

Need for:

- Regular updates.
- Frequent supervisory visit.
- Increased support from the administration
- Sustained availability of equipment and supplies.
- Plough back the cost sharing money to the program.
- Training of more people on –Job.
- Community mobilization.
- Control and eradication of financial mismanagement from all sections including financial documentation and accountability.

Referral for other reproductive health services - provider perspective

The respondents indicated that they referred clients who did not get some elements of PAC services from their facilities to other facilities offering the services or to private practitioners. Some of the health facilities they referred clients to included Kakamega provincial hospital in case of Busia and Machakos hospitals in case of Kajiado.

Availability of services around the clock - provider perspective

The service providers reported that since the training, they had made arrangements for the staff to work on shift or call to ensure that the facilities offer services round the clock (24-hour basis). In addition, there were regular debriefing with the in-charges. They also ensured that equipment is prepared ready for use whenever a client came.

Community involvement - provider perspective

In order to increase awareness about PAC services being offered at the facilities, the service providers reported they continued giving health education to community and clients. The service providers reported that through timely counseling before any procedure and through community health education as well as through provision of health education every morning at the facilities, they had ensured the community accepted and accessed services at the facilities. They had also been able to update community members, other health workers, and stakeholders in the district stakeholders' forums/meetings. In addition, they had encouraged all health facilities in the district to put in place IP measures and incinerators.

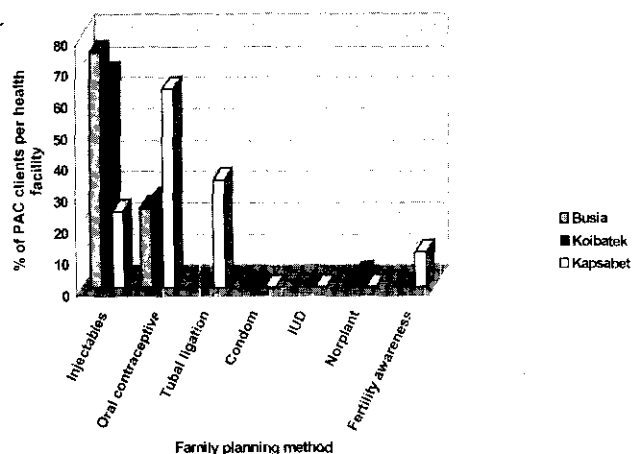
With regard to ensuring the PAC services provided are accepted and rated as of quality by clients, the service providers had put in place proper infection prevention measures. They also provided proper counseling to the clients, got regular feedback through client exit interviews and also provided proper attention, comfort to the clients and ensured confidentiality.

Site Visit Observations

Observation of the health facilities during the assessment revealed that unlike in the past before the whole-site-training, the reproductive health areas in maternity and PAC room were clean, had adequate equipment in working order in 4 sites and in 3 sites (67%) they were managed as restricted areas. In 4 health facilities (80%), the infection prevention protocols were followed strictly and there were adequate infection prevention containers and supplies. However, there was concern from mid-level service providers that doctors tended to break the infection prevention protocol more often than other personnel.

Review of PAC records

Chart 1: Distribution of PAC clients by family planning method taken home



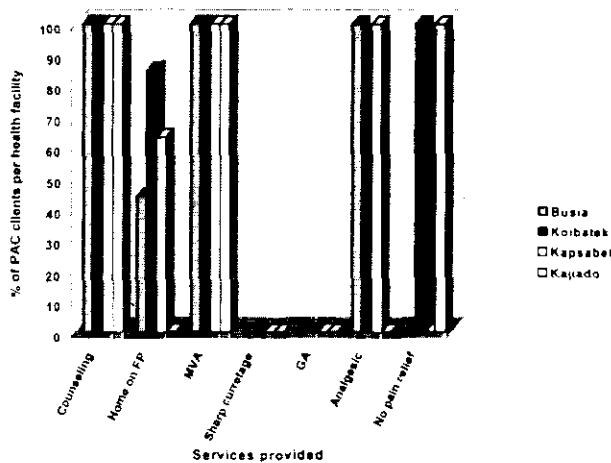
In all health facilities except Kapsabet, the client/patient records were poorly maintained/stored and not properly completed. Despite the MoH printing pregnancy monitoring cards with space for all interventions that will be carried out during antenatal, labor/delivery and postnatal including family planning after delivery, this cards were usually retained with the maternity records instead of completing the relevant part pertaining to labor and giving them back to clients to take to postnatal clinic. One notable practice by all service providers at postnatal clinic was that, they only concentrated on the baby and never bothered even to enquire from the mother how she was.

Comparison of profile of PAC clients from the five health facilities served since quality assurance and improved EsOC including PAC was started at the five health facilities were as follows:

Clients from maternity were referred to MCH/FP for their FP methods where it was not possible to identify these who took FP after delivery from the rest. The most accepted methods were injectable and oral contraceptives.

As shown in chart 2, clients from Kajiado hospital did not take home any contraceptives, either after PAC or delivery. The service providers attributed the non use to Maasai cultural norms despite the counseling that they carried out. Further study may be necessary to separate provider attitude from cultural barriers.

Chart 2: Distribution of PAC clients by services provided



Most clients with abortion complications seem to be within the age group from 20 to 30 years.

Though most clients from chart 3 are of age group 20 -30 years, from chart 4 the shift to para 2 and below, except in Koibatek is strongly suggestive of single women, but there is need for further investigation.

From chart 5, it appears that most abortions occur within gestational age that can be managed by trained nurses with the use of MVA kit.

PAC CLIENT EXIT INTERVIEWS

Only three clients were found in the health facilities after PAC management at Koibatek. There were no clients during the visit at the other four health facilities. All the three who were interviewed were happy with the services despite not getting pain relief because they were all treated with MVA by the nurses immediately on arrival, even the one who came at night. However, the counseling was only provided after emergency care and was limited to family planning. One client out of the three opted for injectable contraceptive.

The study also aimed to establish the number of women who had delivered in the various facilities before and after training in EOC and the findings were as shown in table-5 below:

Chart 3: Distribution of PAC clients from the five health facilities by age

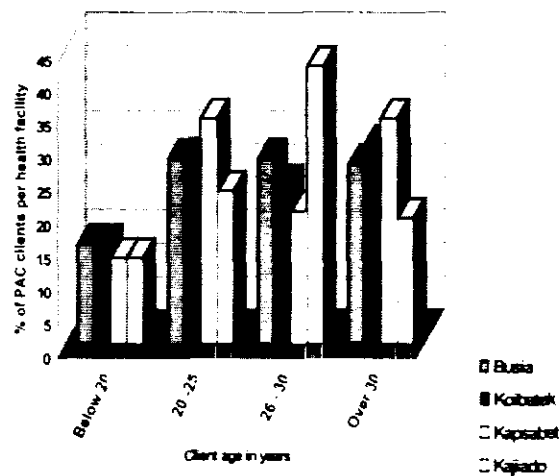


Chart 4: Distribution of PAC clients from the five health facilities by parity

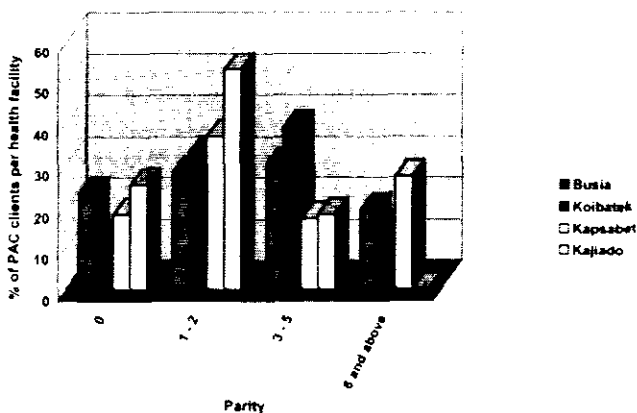


Chart 5: Distribution of PAC clients from the five health facilities by gestation age

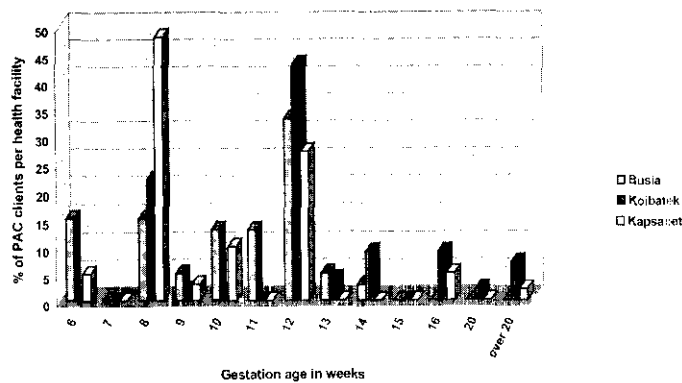


Table 5: Nature and number of deliveries in individual health facilities

Health facility	State of delivery	Total deliveries	SVD	C/S	Breech	Fresh stillbirth	Macerated stillbirth	Neonatal death
Health facility	Time period							
Busia	Jan -Apr.2000	631	583(92%)	24(4%)	12(2%)	10(2%)	10(2%)	
	Oct 2001-Jan 2002	709	610(86%)	50(7%)	11(2%)	14(2%)	24(3%)	
Koibatek	Aug 1999 - Jan 2000	592	569	12	7		4	
	Aug 2001-Jan 2002	595	557	17	10	7	4	
Kajiado	Jan-June 2000	202	181	8	5	2	2	4
	Aug 2001-Jan 2002	209	177	25	4	6	6	1
Kapsabet	Sept 2000-Jan 2001	576	520(90%)	42(7%)	14(3%)			
	Sept 2001-Jan 2002	763	628(82%)	108(14%)	27(4%)			
Mosoriot	Statistics not available due to poor record keeping							

In Kapsabet, there was increase of 28% in deliveries after weighting the two (patients served before and after). There was also an increase in Busia hospital. The health facility management and service providers attributed the increase to client satisfaction as a result of improved quality of EsOC including improvement in staff attitude and spreading the message by satisfied clients at the community level through word of mouth. However, longer implementation time and other factors need to be controlled for before attributing the increase to the intervention.

Use of partographs

The number of women who delivered in the maternity and were monitored using partograph were as follows:

TABLE 6: Review of randomly sampled partograph records for completeness

Health facility	Number of records sampled & reviewed	Fully completed partographs	Completed but with incomplete summary	Well completed but summary completely not done	Partly completed and summary not entered at all.	Only initial recording entered	Completely not filled but summary of labor well filled	Completely not filled with incomplete summary of labor	Completely not filled
Kapsabet	83	29 (35%)	2 (2%)	18 (22%)	9 (11%)		5 (6%)		20 (24%)
Koibatek	Poor client record keeping in records department making record retrieval after they leave maternity almost impossible.								
Kajiado									
Busia	59	1 (2%)	2 (3%)			15 (35%)	10 (17%)	23 (39%)	6 (10%)
Mosoriot	Records not available.								

From Kapsabet, where maternity records could be retrieved from the records department, the providers were monitoring labor using partographs, though there was weakness in summarizing the event. Reasons given for incomplete partographs included: patient arrived on second stage, C/S due to either APH, cord prolapse, elective C/S, foetal distress and referrals from other health facilities

with prolonged labor for emergency C S. Overall, the training had changed the providers' commitment to labor monitoring using partographs.

In Koibatek, it was not possible to tell because of poor record keeping. However, in Kajiado, from available records, all except referred emergency and elective C S and those who came on 2nd stage had partographs. All the summaries were incomplete (No duration of labor, no blood loss, placentas not weighed, no vital signs after delivery) and most of the partographs had flows as follows: Some had only the initial recording, others had no descents and contractions. In some VE were not indicated. No regular monitoring and in a few cases, there was no intervention though the cervical dilatation and descent had remained static way beyond the acceptable limits.

With regard to number of neonatal deaths that had occurred over the last six months, it was not possible to determine in Busia because of lack of record. However, in Koibatek no death was observed. The number of deaths that occurred over the same period one year earlier were four in Kajiado. In Busia between January and April 2001, there were eight neonatal deaths of which most were pre-terms weighing 0.9 and 1.4 Kgs. One was 2.9kg with C S done due to foetal distress and the other was a breech. One was SVD 3.5 kg with Apgar score of 9 at one minute and 10 after 5 minutes and then died. In Koibatek, a total of 592 deliveries over 6 months (August 1999 to January 2000) SVD 569; Breech 7; C S 12; Macerated still births 4; Fresh still births 0.

Lessons learned:

1. Clear demonstration that mid-level providers in the public sector (Nurses and clinical officers) can safely and effectively offer quality EsOC including comprehensive PAC services and thus reduce the workload on the generally overworked understaffed medical officers. Medical doctors constitute only 4% of all the health workers in Kenya, which translates to a doctor population ratio of about 1: 10,000 population.
2. Whole-Site-Training and providing the facilities with the means to implement the newly acquired skills such as essential equipment and supplies is a powerful personnel motivator and increases participation and ownership of EsOC including comprehensive PAC services. However, when availability of the relevant supplies is not maintained, service providers do not only stop giving services but they also abandon practicing the acquired skills.
3. Empowering mid-level service providers to offer quality EsOC including comprehensive PAC services motivates them, makes them have positive attitude to patients and increases access to these services as the nurses and clinical officers are greater in numbers (Nurses have a ratio of 1:993 population) and cover facilities where traditionally there are no doctors, up to the primary level.
4. The relevance of the training to the providers' work created high demand to train more service providers in EsOC including comprehensive PAC than the numbers the project had catered for. Further more, the district health management teams (DHMTs) requested for training of service providers from the sub-district hospitals, health centers and dispensaries in this districts.
5. Ownership of quality EsOC including PAC by health facility management is the only way to ensure sustainability and integration of new technologies into the existing reproductive health services since inclusion of the new technologies into the health facility budget, work plans and future strategy depends on the ownership.
6. Use of appropriate quality improvement tools encourage hospital staff, managers and regional supervisors to collaborate more closely as a team and sustain the quality improvement achieved.
7. Quality improvement incorporated into EsOC including comprehensive PAC is readily accepted by both the health facility management and service providers and gets their buy-in if it is integrated into all existing services rather than in one unit.
8. Integration of EsOC including comprehensive PAC and family planning is more practical and does not hold a tag of a vertical program to both the hospital management and service providers because it blends easily into their daily work thereby getting their support and commitment.
9. Proper trainee selection has strong influence on the motivation and service provider use of the newly acquired EsOC including PAC skills.

Conclusion:

The project trained some of the first mid-level providers - nurses and clinical officers in the public sector using different training approaches with the goal of achieving whole-site training and proved that they can safely and effectively offer quality EsOC including comprehensive PAC services thereby reducing the workload on the generally over stretched medical officers and decongesting the limited available hospital beds. The project also increased women's access by empowering mid-level providers to offer these services as the nurses and clinical officers are greater in numbers as evidenced by nurse ratio of 1:993 population as compared to doctor ratio of 1:10,000 population. The mid-level providers also cover up to primary health facilities (Dispensaries) where traditionally there are no doctors. The project confirms that creation of an environment that enables mid-level providers to care for clients with a spectrum of pregnancy related needs improves the quality of care in understaffed or lower community level facilities.

Recommendations:

1. There is need for more use of whole-site including on-job training in developing countries considering:
 - 1.1. Shortage of service providers where those going for central training would be drawn
 - 1.2. The 3 to 6 monthly mandatory provider redeployment in various departments
 - 1.3. Cost of central training and
 - 1.4. The motivation and teamwork created by whole site training.
 - 1.5. Frequent service provider transfers to other facilities.
2. There is need to develop "structured" on-job training curriculum and teaching aids for EsOC including comprehensive PAC training as to ensure that providers trained on-job meet national standards.
3. There is need for taking training down to lower levels by developing district capacity to conduct EsOC including comprehensive PAC training as a sustainable way of expanding services to primary health care level.
4. There is need to re-introduce the whole concept and skills for postnatal care to service providers in Kenya.
5. There is an urgent need for taking EsOC including comprehensive PAC to primary and secondary level health facilities to stem the flood of cases that reach the tertiary health facilities late.
6. There is need to strengthen documentation of clients in labor who are kept beyond the intervention time (according to partograph) as an indicator of quality of care.
7. There is need for strengthening record keeping system and the culture of using EsOC including comprehensive PAC data at site.

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Disseminating Information for Scaling-up Implementation of Guidelines and Better Practices

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Disseminating information for scaling-up implementation of guidelines and better practices



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Introduction:
Disseminating information

Rick Hughes
Country Director
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Objectives

- Discuss the need for improved approaches to the dissemination of technical information such as guidelines, updates and better practices
- Describe three case studies highlighting different approaches to dissemination in support of national scale-up
- Identify additional actions or types of support that must be addressed to support these types of dissemination activities

Future Directions

- Evidence-based medicine
- Better Practices documentation
- Centralized work on guidelines and standards
- Decentralization / Health Reforms
- Communication and learning technology
- Learning styles and approaches

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Zambian Context

- Health reforms → decentralization
- 72 District Health Management Teams
- 9 Provincial Health Offices
- Thin and over-stretched human resources
- Communication technology limited
- Learning styles and approaches
 - Limited experience with computers
 - Culture of reading not widespread

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Zambian Context (cont)

- Central-level work paying dividends
 - Pilot programs
 - Technical guidance
- Rapidly changing playing field – e.g.:
 - New malaria treatment guidelines and medicines
 - New infection prevention guidelines
 - Revised service provider technical guidelines
 - Introduction of new services (e.g., ARV therapy)
 - Scaling up pilot programs (e.g., PMTCT)
 - Strengthening of services (e.g., PAC delivery care)
 - New and improved management systems (e.g., cost sharing mechanisms, district planning)

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Some Evidence

FP guidelines dissemination in Kenya*

	Knowl. & perf
• Baseline	—
• Distribution	↑
• Dissemination with Orientation	↑↑
• Orientation + Supportive Supervision	↑↑↑

* See presentation: 'Echoing information: an effective way of reaching many providers in Africa'

Zambian Approaches

- **Malaria during pregnancy**
 - 1-day orientation for Provincial and District Teams
 - Provincial groupings, ave. 5 people / district
 - Primarily knowledge based
- **Postabortion care (PAC) expansion**
 - 3-day orientation for Provincial, District and Hospital management teams
 - Focus on provincial center, ave. 15 people / district
 - Mixed knowledge and application
- **Infection prevention guidelines**
 - 2 week clinical training
 - 2 people / district
 - Knowledge and skills, including training skills

Case 1: Dissemination and implementation of malaria during pregnancy guidelines

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Program Manger
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Malaria During Pregnancy: Context

- **Overall Antimalarial Drug Change**
 - High resistance to chloroquine (CQ)
- **Specific Malaria in Pregnancy Guidelines**
 - Expanded recognition of data on the impact of malaria in pregnancy
 - High resistance to CQ
 - Low rates of provision of CQ prophylaxis
 - Expansion of ITN programs focused on pregnant women
 - High rates of maternal anemia (~50%)

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Malaria During Pregnancy: Content

- **Change in antimalarial use in pregnancy**
 - CQ prophylaxis → SP presumptive treatment (IPT)
 - CQ → SP / Quinine as first line therapy
- **Strengthen integrated services for pregnant women**
 - Prevention / ITNs
 - Intermittent Presumptive Treatment (IPT)
 - Anemia prevention and management
 - Case management of symptomatic malaria in pregnant women

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Malaria During Pregnancy: Opportunity

- **Quickly capitalize on an opportunity**
 - "Simple" message
 - Primarily knowledge and motivation
 - Why?
 - What?
 - How?
- **Focused Target**
 - ANC providers in public sector (> 90% attendance)
- **Political Commitment**
 - Growing awareness of maternal health as a priority area
 - Targeted programs and technical assistance: Global Fund, RBM, UNICEF, USAID, WHO

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Malaria During Pregnancy: Process

- Development of an essential orientation package, job aids, monitoring tools
- Orientation of Provincial & District teams
- Provision of orientation materials to Districts
 - Responsible for orienting health workers
- Orientation for additional stakeholders (and provision of materials)
 - Preservice / training institutions
 - NGOs, church-based institutions, private providers
- Linked BCC and social mobilization activities
 - Targeting service providers, community workers, communities and individuals

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Malaria During Pregnancy: Orientation Package

08:30 Pre-test

09:00 Objectives and Introduction

09:30 Medical Background

10:30 Guidelines and Best Practices

- Prevention / ITNs
- Intermittent Presumptive Treatment
- Anemia Management and Treatment
- Case Management of Symptomatic Malaria in Pregnancy

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Malaria During Pregnancy: Orientation Package (cont.)

- 14:00 Key Technical Updates
 - Focused antenatal care
 - Correctly staging a pregnancy
 - Ruling out pregnancy for case management
- 15:00 Outreach Activities
- 15:30 Next Steps
- 16:00 Summary & Conclusions
- 16:30 Post-test

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Malaria During Pregnancy: Dissemination

- **Rapid**
 - National coverage in < 6 months
 - Face-to-face interaction
 - 9 Provinces
 - 72 Districts
 - >300 managers and providers
- **Service Delivery Impact**
 - Too early to tell
 - M&E tools being put in place
 - Provision of IPT
 - Use of ITNs
 - Low birth weight

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Malaria During Pregnancy: Dissemination (cont.)

- **Effective First Stage**
 - Pre- / Post-test
 - 40% pass → 91% pass mark (scored at least 85%)
 - Overall 11% gain in average scores
 - **Course Evaluation**
 - 87% felt Very Confident
 - 80% felt Highly Motivated
 - **Comments**
 - Overwhelmingly appreciative of both method and content of dissemination

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Case 2: Dissemination and implementation of PAC guidelines and services

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Postabortion Care (PAC): Context

- MVA introduced in 1990
 - Medical students familiar with MVA
- PAC Assessment (1997-98)
 - Rarely available outside teaching hospital
 - Focused on emergency care
 - No linkages
 - Poor infection prevention, weak counseling
- Formation of National PAC Task Force
 - Mandate to expand PAC nationally, to 100 facilities

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Postabortion Care (PAC): Content

- PAC Concept
 - Preventive services (FP)
 - Opportunistic (linkages to other RH services)
 - Quality framework (counseling, infection prevention)
 - Facility Guidelines
 - Technical approach
- Expansion program
 - Context
 - PAC Assessment
 - National Task Force
 - Action Plan
 - Training approach and systems
 - Roles of Provincial / District / Hospital Management

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Postabortion Care (PAC): Opportunities and Challenges

- National expansion in decentralized system
- Limited resources
 - Need to create buy-in within the system
- Phased approach
 - Core training sites (national referral hospitals)
 - Provincial training sites
- Experience gained from Phase 1
 - Staff transfers, supplies / equipment shortages, etc.
 - Need for broad consensus and support

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Postabortion Care (PAC): Process

- **Development of essential orientation package**
 - Management understanding and buy in
 - Preparation for role in expansion program
 - Site selection and preparation
 - Supervision
- **Orient Provincial, District & Hospital teams**
 - 3½ day comprehensive program
 - Mixed knowledge, motivation and skills
- **Establishment of PAC services and training**
 - Site strengthening
 - IP, FP, infrastructure & organization
 - PAC Service Provider Training
 - Clinical Training Skills

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Postabortion Care (PAC): Orientation Package

- **Objectives – to be able to:**
 - Describe the key elements of quality PAC services
 - Understand our own and each other's roles in the PAC expansion program
 - Explain the importance of PAC services to health workers and partners
 - Assist in the identification, preparation, and initiation of potential PAC service sites

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Postabortion Care (PAC): Orientation Package (cont.)

Day 1	Day 2	Day 3	Day 4
<ul style="list-style-type: none"> • Intro to PAC • PAC Needs Assessment • NPTF Action Plan • Roles & responsibilities • Training & supervision materials • Integration of FP and RH into PAC • NPTF Action Plan 	<ul style="list-style-type: none"> • Intro to IP • IP video • IP observations in the hospital • PAC Guidelines • PAC technique, procedure, & checklists for supervisors • PAC clinical skills video 	<ul style="list-style-type: none"> • Organization, equipment & supplies • PAC at different levels • Organization for PAC training • "Put Yourself in Her Shoes" video • PAC planning observations in the hospital 	<ul style="list-style-type: none"> • Orientation of hospital staff by participants • Discussion, review and revision • The way forward

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Postabortion Care (PAC): Dissemination

- **Time consuming**
 - Pace of orientations linked to the roll out of service strengthening
 - Commitment of senior managers to 3 day workshop
- **Making headway**
 - All Provinces Oriented
 - 2 Provinces in phase 1 (1999-2001)
 - Without orientation package
 - 7 Provinces in phase 2 (2002)
 - With orientation package
 - Difficult to separate out the impact of the orientation

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Postabortion Care (PAC): Results

- **Overall expansion progress**
 - 132 senior managers oriented in 7 Provincial centers
 - Over 250 service providers trained in some aspect of the program
 - 6 PAC clinical training sites established and functioning
 - 8 sites established as PAC services sites, a prerequisite to establishing training capacity
 - 10 sites completing institutional strengthening, a prerequisite to establishing PAC services
 - 20,000 women received strengthened PAC services*
 - >10,000 women accepted modern FP within PAC services*

* Estimated PAC service site statistics, from 1 00 to 5 03

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Case 3: Dissemination and implementation of national infection prevention guidelines

Joseph Nikisi
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Infection Prevention Guidelines: Context

- **Overwhelming evidence of poor IP practices**
 - PAC assessment
 - Hospital accreditation surveys
 - Midwifery education assessment
 - GNC service assessments
 - Various baseline assessments
 - Field experience and observations
- **Initial work done, e.g.,**
 - PAC infection prevention strengthening
 - Midwifery and nursing curriculum strengthening
 - Inservice training package

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Infection Prevention Guidelines: Content

Standards and Skills

- Hand hygiene
- Gloves
- Personal protective equipment
- Instrument processing
- Handling sharps during procedures
- Waste management
- Housekeeping
- Skin & mucous membrane preparation
- Traffic flow and activity patterns
- Transmission based precautions
- Monitoring infection prevention
- Problem resolution
- IP in the home care setting
- IP in traditional practice

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Infection Prevention Guidelines: Opportunity

- **Increase recognition of IP as a major weakness**
- **Fundamental, crosscutting quality of care issue**
- **Links to HIV prevention**
 - Protect communities / clients
 - Protect health workers
 - Improve conditions of service

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Infection Prevention Guidelines: Dissemination

- Previous IP orientation and training of managers and service providers
 - PAC Orientation – Provincial and Provincial Center (DHMT and Hospital) managers (132)
 - IP on-site strengthening – Provincial center service providers (244)
 - RM strengthening – Clinical training at midwifery schools and their practical training sites (127)
 - Inservice training (ICT) – District service providers ()

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Infection Prevention Guidelines: Process

- Proposed Process
 - Supplement work that has been done
- In-depth clinical training
 - 2 week clinical training
 - 2 people / district
 - Knowledge and skills, including training skills

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Infection Prevention Guidelines: Process

- | <u>Pros</u> | <u>Cons</u> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Standardized knowledge and practice• Develop higher level of individual expertise• Increased individual capacity to implement and supervise• Strengthen training skills along with technical skills• ↑ transfer of knowledge at 2nd tier training | <ul style="list-style-type: none">• Fewer people directly oriented / trained• Time consuming• Commitment of time (participants and trainers)• Resource intensive• Burden for 2nd tier orientation training rests on a few• Costly if trainees transfer / don't follow-through |

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Infection Prevention Guidelines: Dissemination (cont.)

- **Service Delivery Impact**
 - Too early to tell
- **Anecdotally**
 - Some evidence of improvements
 - Resource constraints major obstacle
 - Habits (e.g., hand washing) difficult to change

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Summary: Disseminating information

Rick Hughes
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Dissemination Better Than Distribution

- **Anecdotal evidence**
 - Under utilization of guidelines
 - "Books" gathering dust
 - Not available where needed
 - Personal versus institutional property
 - Poor uptake of better practices
- **Research evidence (Kenya*)**
- **Positive feedback from dissemination in Zambia**

* See presentation "Echoing information: an effective way of reaching many providers in Africa"

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Distribution vs Dissemination

Distribution

- Leaves questions
 - Does it get to the right people?
 - Do they know what it is, or how to use it?
 - Can they use it?
 - Do they use it?
 - At all
 - Consistently
 - Correctly
 - Where to get answers to questions?

Dissemination

- Tries to address the questions
 - Reach specific people
 - Focus on key messages
 - Standardize information and interpretation
 - Add to 'credibility'
 - Empower users
 - Encourage and motivate users
 - Answer questions

Three Models of Provincial-level Dissemination

PAC	Malaria	IP
• Building long-term momentum	• Immediate widespread changes / results	• Correct fundamental deficiencies
• Phased expansion	• Rapid national coverage	• Rapid national coverage
• More complex	• Focused message	• Moderately complex
• Knowledge & limited skills	• Knowledge-based	• Knowledge & skills
• 3+ day orientation	• 1 day orientation	• 2 week training
• Labor intensive	• Moderate depth (5 / district)	• Labor and time intensive
• Greater depth (15 / district)		• Minimal depth (2 / district)

Three Models of Dissemination in a Decentralized System

All 3 aimed at national coverage

- 2 aimed at immediate national coverage
 - Brought districts together at the provincial level
- 1 took a phased approach, and targeted Provincial centers
 - Build their capacity to expand to additional districts

Three Models of Dissemination

- *Not interchangeable*
- Depends on scope of the intervention
 - e.g., malaria during pregnancy versus PAC
- Depends on immediate needs as well as long-term goals
 - Momentum for sustained change
vs
 - Rapid implementation and scale-up

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Group Discussion

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HIV/AIDS Training in Eastern and Southern Africa: Results from a Twelve-country Needs Assessment

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THE REGIONAL
HIV/AIDS TRAINING
NEEDS ASSESSMENT
.....
REGIONAL AIDS TRAINING NETWORK
CENTRE FOR AFRICAN FAMILY STUDIES
USAID
.....

.....
*IMPLEMENTED BY THE CENTRE FOR
FAMILY STUDIES (CAFS) & THE
REGIONAL AIDS TRAINING NETWORK
WITH SUPPORT FROM U.S.AID REDSO.*
.....

JUSTIFICATION
.....
▪ Little information available on existing
training needs in the ESA region except for
UoN UoM 1994 Needs Assessment.
▪ Little known on the supply of training at the
national level
▪ Little known on existing demand and
support for training.

Objectives

- Overall Goal to assess the needs for training in the broad domain of HIV/AIDS
 - Document existing training opportunities and needs in the ESA region.
 - Identify gaps in current pre-service and in-service HIV/AIDS training programs
 - Identify emerging training needs and trends, including those resulting from implementing new HIV/AIDS interventions such as PMCT and ARVs.

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- Assess the market demand for training, the priority given to training at the policy level and the level of resources allocated to support it
- Determine the appropriate profiles of those cadres of HIV/AIDS workers that require training, and whether current training programs address these groups.
- Assess the potential of institutions in ESA to deliver the type of training needed; and

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- Identify strategies for organizing training in ESA

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Methods

▣ Desk Review

- Policy documents at the national level
- Existing training curricula on HIV/AIDS training
- Training program strategies and M&F data

▣ Key Informant Interviews

- Experts - HIV/AIDS P. Managers
- Training Programmers
- Donors - Community based supervisors

Key Informant Interviews

The interviews collected information on the following areas:

- Existing and new HIV/AIDS interventions and policies in ESA
- The skills required to implement HIV/AIDS programs and the cadres to be trained
- Approaches to training in HIV/AIDS
- Support for training in HIV/AIDS
- Existing training opportunities in HIV/AIDS in ESA (course types, objectives, how the courses are conducted, cadres trained, trainers, evaluation methods)

Countries of focus

- ▣ Botswana
- ▣ Ethiopia
- ▣ Malawi
- ▣ Mozambique
- ▣ Namibia
- ▣ Rwanda
- ▣ South Africa
- ▣ Tanzania
- ▣ Uganda
- ▣ Zambia
- ▣ Zimbabwe
- ▣ Pilot study carried out in Kenya.

512 Key Informants

▪ Botswana	50
▪ Ethiopia	53
▪ Malawi	40
▪ Mozambique	33
▪ Namibia	50
▪ Rwanda	52
▪ South Africa	50
▪ Tanzania	46
▪ Uganda	44
▪ Zambia	44
▪ Zimbabwe	50

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Status of study – March 10, 2003

- All country studies finalized and draft reports written.
- *Regional report also available in draft form*
- Awaiting approval of reports by USAID and wide dissemination to follow immediately thereafter.

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General findings

- Majority of training needs still not being met in most countries – ARV training, training for laboratory workers, treatment of opportunistic infections, frequent updates on HIV/AIDS, program management and administration....
- In HIV/AIDS a move is needed towards skills based training as opposed to knowledge based training.
- HIV/AIDS topics not formally included in pre-service training in most countries.

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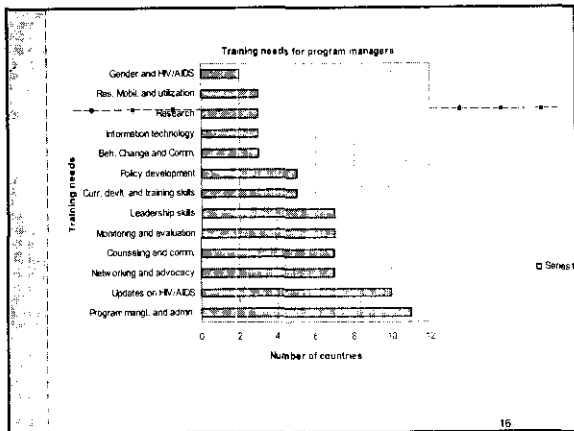
- ▣ In-service training curricula not frequently updated and in most countries happening in un-coordinated manner.
- ▣ No national resource base on available training, where it is offered and its effectiveness.
- ▣ Training needs of people in sectors other than health in most countries – not met despite the implementation of the multi-sectoral approach to HIV/AIDS.

- ▣ Support and demand for training exists but most people do not know where to access training and how to find the resources for training.

**Training needs for HIV/AIDS programs
Managers**

Program managers were defined as individuals who are responsible for developing, implementing and reporting on structured organisational activities related to HIV/AIDS.

Sixteen training areas were mentioned for HIV/AIDS program managers and administrators



Program management and administration was mentioned by all the 11 countries as a priority training area for program managers

- The focus of this training should include skills in program and project development, fund raising, resource management (including human resource management), program monitoring, program coordination and evaluation, advocacy, networking and impact assessments.
- The study did not identify any training program that covers this training need and that targets this cadre of workers.

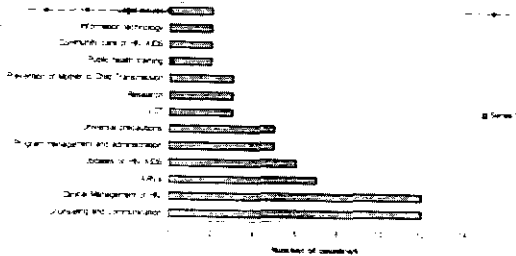
Frequent updates on HIV/AIDS was the second most frequently mentioned training area for program managers, identified by 10/11 countries

- The focus of frequent updates in HIV/AIDS should include an in-depth understanding and appreciation of HIV/AIDS intervention strategies, the social context and biomedical dimensions of the epidemic, dimensions of HIV/AIDS impact, basic epidemiology, determinants of spread of HIV, HIV/AIDS strategy analysis and cost-effective analysis of HIV/AIDS interventions.

Training needs for doctors

- Twenty-two training areas were identified for doctors.

Figure 2 Regional training needs for medical doctors



Priority Training Needs for Doctors

- Communication skills and counselling
- Clinical management of HIV/AIDS
- Use of ARV's
- Updates on HIV/AIDS
- Program management and development
- Universal precautions
- VCT
- Research PMTCT

Other cadres for which information was collected, and the high priority training areas

- ☒ *Nurses/clinical officers*
 - Counselling, communication
 - Community care of HIV
- ☒ *Community-based supervisor*
 - Counselling, communication
 - Program mgmt and administration
- ☒ *Non-technical staff in the health sector*
 - Basic information on HIV/AIDS
 - Universal precautions

Emerging Training Needs

- ☒ *ARV's*
 - Doctors, pharmacists, nurses, clinical officers
- ☒ *PMTCT*
- ☒ *VCT*
- ☒ *Working with communities*
- ☒ *Working with youth, orphans/vulnerable children*
- ☒ *Vaccines*
- ☒ *Advocacy and networking*

Training needs in training institutions

- ☒ *Medical schools and colleges*
 - Pre-service training institutions had been slow in integrating HIV/AIDS into their curriculum (no specific course module found)
 - Areas identified include developing curricula, course content and materials integrating HIV/AIDS into medical school training.
 - Trainers need to receive frequent updates on HIV/AIDS
 - Issues related to psycho-social counseling and emotional support for patients also need to be integrated into the medical school curricula, clinical management or HIV/AIDS and ARV treatment, socio-economic context of HIV/AIDS disease and community based support systems.
 - Training of trainers on the use of information technology

Training gaps - general

- Some training needs that cut across all HIV/AIDS program cadres include:
 - ◆ regular updates on HIV/AIDS
 - ◆ universal precautions
 - ◆ human rights and ethics
 - ◆ counseling and inter-personal communication
 - ◆ information technology
 - ◆ working with communities.

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Training gaps – specific 1

- **HIV/AIDS program managers** - training in program mgmt and admin. regular updates on HIV/AIDS - No course was found in the region for this group.
- **Doctors** need training in clinical mgmt of HIV/AIDS (including ARV mgmt and PMTCT); counseling and communication skills related to working with communities. Various countries have mounted counselor training programs but these rarely target medical doctors.
- **Nurses and clinical officers** need training in skills related to working with people living with HIV/AIDS particularly in administration and mgmt of ARVs, counseling and communication (incl issues on human rights, patient confidentiality, ethics); regular updates on HIV/AIDS.

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Training gaps – specific 2

- **Supervisors of community-based programs** - training in approaches of working with communities incl participatory programming and resource mobilization.
- **Staff working in the health sector, other than doctors and nurses**, various training needs, eg training pharmacists pharmacy assistants in ARV logistic mgmt, drug interactions and side effects; training of laboratory technicians in diagnosis and issues related to blood screening and safety; training of dental technicians in skills related to working with people living with HIV/AIDS; public health officers in mainstreaming HIV/AIDS into their day-to-day work, etc.

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Training gaps – specific 3

- ❑ **Non-technical staff** working directly or tangentially with PLWHA within the health sector need training in basic facts on HIV/AIDS, issues of confidentiality and ethics, waste management and prevention of infection at the workplace.
- ❑ Few **pre-service medical training institutions** have integrated HIV/AIDS into training content. However, this was often done within broader modules and generally limited time being allocated to HIV/AIDS. There is need to develop specific modules on HIV/AIDS that can be integrated into pre-service training.

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Training gaps – specific 4

- ❑ Need to assess and address specific HIV/AIDS training needs of **individuals working in sectors other than health** to strengthen the multi-sectoral approach to HIV/AIDS (education, agriculture, business or private, faith-based sector, transport and other development related programs)

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Recommendations 1

- ❑ The various gaps that have been identified should be addressed at the regional level but with a focus for developing country specific training capacities. This could be done through a combination of mechanisms such as development of standardized trainers of trainers' modules at the regional level, twinning of training institutions and enhancing networking processes in HIV/AIDS training.
- ❑ There should be institutional and program/project linkages to enhance the sharing of good practices, experiences and expertise in HIV/AIDS training within the ESA region. The study found that there exist inequalities in the availability of training between countries and this strategy could help address this gap.

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Recommendations 2

- Guidelines for integrating HIV/AIDS within pre-service training within all sectors need to be developed.
- Effective in-service training that is responsive to the evolving needs of participants should be delivered at the regional level. Institutions that deliver this training should provide an integrated package of technical and management training as well as offer supportive follow-up to participants in the field.
- Training programs should consider the implementation of alternative and complementary training approaches (eg distance education, problem based learning, program attachments) when providing continuous education to people working in HIV/AIDS.
