

**Report on the Consensus Workshop on
EPI Curricula Prototypes
for
Medical and Nursing/Midwifery Schools
in the WHO African Region**

Douala, Cameroon, 13-17 March 2006

A Technical Report

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List of abbreviations

(Includes abbreviations in this report and in the workshop CD material)

AD	Auto-disable (syringes)	MCH	Maternal and child health
AEFI	Adverse event following immunization	MDG	Millennium Development Goals
AFP	Acute flaccid paralysis	MEDUNSA	University of Limpopo (of South Africa)
AFRO	African Regional Office (of WHO)	MOE	Ministry of Education
AMP	Association Medicine Preventive	MLM	Mid-level Management (course)
BCG	Bacillus Calmette-Guerin	MNTE	Maternal and neonatal tetanus elimination
CB	Capacity building	MOH	Ministry of Health
CBO	Capacity Building Officer	N.A.	Not available
CC	Cold chain	NESI	Network for Education and Support in Immunization
CD	Compact disk	NGO	Non-governmental organization
CE	Content Element	NID	National Immunization Day (a campaign for polio eradication initiative)
CHW	Community health worker	NIP	National Immunization Programme
cMYP	comprehensive Multi Year Plan	NRA	National Regulatory Authority
CVP	Children Vaccine Program	OPV	Oral polio vaccine
DHMT	District Health Management Team	PATH	Program for Appropriate Technology In Health
DOR	Dropout rate	PH	Public health
DPT	Diphtheria, pertussis, tetanus (vaccine)	PHN	Public health nurse
ESAR	East and South African Region (UNICEF)	PHC	Primary health care
GAVI	Global Alliance for Vaccines and Immunization	POA	Plan of action
GIVS	Global Immunization Vision and Strategy (of WHO and UNICEF)	RED	Reaching every district
EPI	Expanded Programme on Immunization	SIA	Supplemental Immunization Activities
HepB	Hepatitis B (vaccine)	TNA	Training needs assessment
Hib	Haemophilus influenzae type b (vaccine or infection)	TOR	Terms of reference
HRD	Human resource development	TOT	Training of trainers
HRH	Human sources for health	UCI	Universal Child Immunization
ICC	Inter-agency Coordination Committee	UNF	United Nation's Fund
ICT	Intercountry Team (of WHO)	UNICEF	United Nation's Children Fund
IDSR	Integrated disease surveillance and response	USAID	United States Agency for International Development
IEC	Information, education and communication	UTH	University teaching hospital
IIP	Immunization in Practice (WHO training course for peripheral health workers)	VPD	Vaccine preventable diseases
IMCI	Integrated Management of Childhood Illness	VVM	Vaccine vial monitor
LCD	Liquid crystal display	WHO	World Health Organization
		WCAR	West and Central African Region (UNICEF)

Table of Contents

List of abbreviations

1. Introduction
2. Objectives and expected results
3. Participants, Facilitators and the Secretariat of the Workshop
4. Workshop documents and reference materials
5. Opening ceremony
6. The methods of work of the workshop
 - 6.1 Training of trainers (TOT) session
 - 6.2 Plenary sessions
 - 6.3 Group work
 - 6.4 Facilitators' meeting
 - 6.5 Information on CDs and EPI websites
7. Presentations
 - 7.1 Presentations for updating participants on new developments in EPI
 - 7.2 Individual country presentations
8. Questions and answers
9. Comments and discussions
10. Other issues and useful announcements
11. Immediate actions to be taken by participants after the workshop
12. Evaluation of the workshop (Daily and end-of-workshop overall evaluation)
13. Accomplishment of the Objectives
14. Recommendation of the workshop participants

Annex 1: List of participants

Annex 2: Tentative Agenda of the workshop

Annex 3: Review and Comments by working groups on Prototype Curricula

Annex 4: Contributions of working groups to overall workshop recommendations

Annex 5: Satisfaction index based on results of the final evaluation by participants

Report on the Consensus Workshop on EPI Curricula Prototypes for Medical and Nursing/Midwifery Schools in the African Region Douala, Cameroon, 13-17 March 2006

1. Introduction

The Global Immunization Vision and Strategy (GIVS) document presented to the 58th World Health Assembly calls for the strengthening and improvement in programme management for the realization of the vision. In the EPI Strategic Plan of Action for African Region 2001-2005 the capacity building and training are included among “major areas of action”. The plan indicates that the training should be seen as an entry point of all reforms and innovations within immunization programme. It further elaborates that the training in immunization must always remain support action to quality service delivery. Pre-service and in-service training needs to be strengthened. Trainers, educational materials, pedagogic scenarios and research should be supported to equip the new graduates with the necessary skills and knowledge in line with Global Immunization Vision and Strategies and Millennium Development Goals.

Expanded Programme on Immunization (EPI) reviews in many countries reveal gaps in training, planning and management at district and service delivery levels. Training Needs Assessments (TNA) in 14 countries refer to the needs for management training, bottlenecks between pre- and in-service training, poor coverage of EPI topics or outdated curriculum, lack of training of teachers on current practices, innovations and new technologies in EPI. This critical situation necessitated broader collaborative efforts from partners: WHO, UNF, USAID, UNICEF, NESI, AMP, CVP/PATH, etc., to revamp the training.

The recent report on external evaluation of the EPI management training also recommended to encourage countries to link professional education and academics with service realities harmonizing pre-service and in service training. The report further suggested that an EPI generic curriculum for pre-service training institutions should be developed and disseminated through workshops and seminars at country level.

There has therefore been a collective opinion that a systematic revision of EPI curriculum for both medical and nursing/midwifery schools should be carried out with adequate follow up through improved planning, supportive supervision and updating of reference materials including norms, standards and job descriptions of posts that the students will fill after graduation.

To facilitate the EPI curriculum revision process within countries, WHO/AFRO in collaboration with other immunization partners such as UNICEF and the Network for Education and Support in Immunization (NESI) has drafted two EPI curricula prototypes for both medical and nursing/midwifery schools. Accordingly AFRO, UNICEF, AMP and NESI have organized a workshop for professors/teachers to get a consensus on the two curricula prototypes.

2. Objectives and expected results

The general and specific objectives of the workshop are presented below.

The general objective of the workshop was:

To contribute to the reduction of morbidity and mortality due to vaccine preventable diseases in the African Region.

The specific objectives of the workshop were:

1. To update participants on the current immunization policies and strategies including Global Immunization Vision and Strategy (GIVS).
2. To get a consensus on the EPI curricula prototypes for Medical, Nursing and Midwifery Schools in the WHO African Region.
3. To make recommendations for the implementation of the EPI curricula revision process within the African health pre-service training institutions.

The expected results of the workshop were:

1. Participants are updated on the current immunization policies and strategies, including GIVS;
2. Consensus on the two EPI curricula prototypes for medical and nursing/midwifery schools is obtained;
3. Recommendations are made for the revision of respective EPI curricula in line with the agreed curricula prototypes.

3. Participants, Facilitators and the Secretariat of the Workshop

The Consensus Workshop on EPI Curricula Prototypes for Medical, Nursing and Midwifery Schools in the African Region took place in Douala, Cameroon from 13 to 17 March 2006. The workshop was conducted in two official languages of the WHO African Region (English and French) with simultaneous interpretation in these two languages. A total number of 49 participants from 21 countries attended the workshop (*Annex 1*). The participants were Heads/Training Coordinators of Colleges/Faculties of Medicine and University departments (13), professors (8), teachers, tutors (20) as well as representatives of Ministries of Health (6) and partner organizations (2).

Participating Countries:

Benin	Cote D'Ivoire	Niger
Burkina Faso	DRC Congo	Senegal
Burundi	Ethiopia	Tanzania
Cameroon	Ghana	Togo
Central African Republic	Kenya	Uganda
Chad	Mali	Zambia
Congo Brazzaville	Madagascar	Zimbabwe

The workshop was facilitated by a pool of experts (11) from WHO AFRO (2), WHO Intercountry Team (3) and Country Offices (1), UNICEF Regional Office (1), MEDUNSA University of South Africa (1), AMP (1), and consultants recruited by NESI (2). Among

facilitators 2 were professors which included the Dean of Medical Faculty of Yaounde University.

The workshop Secretariat included Dr. E. Mutabaruka, CBO/AFRO and DR. Z. Maiga, Team Leader ICP/Central Block as Workshop Directors, Prof. P. Ndumbe and Dr. L. Arevshatian as General Rapporteurs and other facilitators, and support staff. Two data managers were also in the Secretariat to ensure electronic media support to the workshop.

4. Working Documents and Reference materials

The Douala workshop was indicative of AFRO's increasing emphasis on integrating EPI into existing structures and institutions. W.H.O and NESI have developed, in French and English, draft curricula for medical and nursing schools: *Prototype Curriculum on Immunization for Medical Schools in the WHO African Region, July 2005*; *Prototype Curriculum on Immunization for Nursing Schools in the WHO African Region, July 2005*¹ which were the main **working documents** of the workshop.

The reference documents and materials (CDs) included:

- Immunization Policy. WHO/HQ/Geneva 2000
- EPI Norms and Standards. WHO/HQ/Geneva 1998
- Global Immunization Vision and Strategy (GIVS) 2006-2015. WHO/UNICEF, April 2005
- Guidelines for Developing a comprehensive Multi-year Plan (cMYP) in line with GIVS. WHO/UNICEF, June 2005
- AFRO EPI Regional Strategic Plan 2001-2005. WHO/AFRO unpublished document 2000
- Implementing RED approach- A Guide for District Health Management Teams. WHO/AFRO, November 2004
- Mid-Level Management (MLM) Training Modules. WHO/AFRO March 2004 (in CD)
- Immunization in Practice (I I P) Training Modules. WHO/HQ/Geneva 2004 (in CD)
- Strengthening the Teaching of Immunization Services in basic training programmes: Manual for Instructors of PHC Workers.WHO/EPI/TRAM/93.4.WHO/HQ/Geneva 1993
- Strengthening the Teaching of Immunization Services in Basic (Pre-service) Education Programmes for Nurses and other Health Professionals.WHO/TRAM/97.01. WHO/HQ/Geneva 1997.

5. Opening Ceremony

After introduction of participants and administrative announcements, Dr. Maiga greeted participants on behalf of Dr. Mambu ma Disu, WHO Representative for Cameroon who has travelled to Libreville for WHO Programme Meeting for countries in Central African Epidemiological Block. In his speech Mr. B. Davis of UNICEF underlined the importance of training in immunization in relation to field performance of health workers. He mentioned that field visits by him and his colleagues revealed that health workers need more training on EPI essentials, therefore he expects that this workshop will play an important role in training of future health workers.

¹ A copy of the workshop proceedings on CD-ROM is available with Dr. Mutabaruka, CBO/VPD/AFRO. Dispatch is by pouch through WHO Country Representatives' Offices.

The workshop was officially opened by Prof. P. Ndumbe on behalf of National Authorities stressing the importance of the workshop and its expected results. He mentioned that in view of training needs assessments (TNAs) carried out in several countries of the African Region, the participants of the Task Force for Immunization (TFI) meeting-2005 found that the timing of the workshop is appropriate and hoped that it will improve the teaching in immunization by Medical faculties and Nursing schools in the Region. He thanked AFRO and NESI for organizing this important workshop to bring together participants from English and French speaking countries of the African Region.

Dr. E. Mutabaruka, the Director of the workshop who was also acting as the Chairman of the workshop proceedings, thanked Prof. P. Ndumbe and other presenters and led the participants throughout the workshop programme (*Annex 2*).

6. The methods of work of the workshop

The workshop included a variety of methods and techniques: training of trainers' session, plenaries, group discussions, individual reading of the background documentation, interpersonal communication and networking to exchange experiences and explore new venues for collaboration.

6.1. Training of Trainers (TOT) session

Three-day training session was held for facilitators to orient them on the workshop agenda, working documents and specificity of the workshop. Facilitators finalized their presentations and shared them with other members of TOT group to harmonize interventions and get their comments. The group also visited the conference venue to see whether facilities were adequate to accommodate large number of participants during the plenaries and group discussions.

6.2. Plenary sessions

Plenary sessions included presentations by facilitators of the background working documents and topics to build up basis for group discussions. Administrative announcement were also made to ensure timely arrangements of workshop logistics, per-diem payment to participants, catering services, transport of participants, etc.

6.3. Group work

The workshop participants were divided into four groups as follows:

- **Group 1:** Anglophone group for teachers in Medical Schools;
- **Group 2:** Francophone group for teachers in Medical Schools;
- **Group 3:** Anglophone group for teachers in Nursing/Midwifery Schools;
- **Group 4:** Francophone group for teachers in Nursing/Midwifery Schools;

A Guideline for working group programme was prepared by facilitators and distributed to all group members. It helped to develop a common framework for discussions and come up with presentations which can be harmonized during the plenary sessions.

The groups elected chairpersons and rapporteurs for proceedings and group deliberations using flip charts and laptops. Subsequently, the groups reviewed the "Prototype curriculum on immunisation for medical schools in the WHO African Region". They made suggestions for improvement of the curriculum prototypes, the major one being to reflect in the document the

intensity of training of three main categories of medical students: General Medicine, Specialist Medicine and Public Health , as well as for nurse and midwifery students. It was felt that the medical graduate after qualifying did not undergo training before being appointed to the district health medical officer and therefore the in-service training should be comprehensive enough to allow for functioning at the district level.

After this initial discussion the job descriptions for the 3 posts were reviewed and the discussion proceeded to outline the core content to be included for the teaching of the EPI programme. The information was captured as per the above guideline viz. writing the main topics, enabling objectives, content elements, teaching methods, media used for teaching, practicals to be conducted, evaluation and time allocations including field placements.

The second day of the group discussion was allocated for proposing an implementation plan for the updating and revising the curriculum and to develop a five year action plan.

After two days of group work, the session ended with the groups making specific and general recommendations to support the process for revision and updating the curriculum of teaching institutions of the EPI in the African Region. The groups then made presentations on their deliberations in the plenary sessions.

6.4. Facilitators' meetings

After each working day with participants, the facilitators had one hour meetings to review day's achievements and problems. These constructive meetings assisted facilitators to improve their performance and eliminate possible constraints in achieving the workshop objectives.

6.5. Information on CDs and EPI Websites

A CD-ROMs which include the AFRO MLM Training on Immunization core modules, "The Immunization in Practice" (IIP) series with 8 interrelated modules and "Resources for Immunization Managers" were distributed to all participants.

The modules and other WHO publications related to Immunization for training, are also available on the WHO homepage (www.who.int/vaccines-documents).

USAID has French and English versions of "Immunization Essentials" for distribution to interested parties Teachers wanting copies, in print or CD ROM form, should write directly to aweaver@usaid.gov

7. Presentations

7.1. Presentations for updating participants on new developments in EPI (See Annex 2 for the names of presenters)

On Workshop syllabus: The presenter made this introductory presentation on general context of the workshop (challenges by GIVS, MDGs, results of TNAs, etc), target audience, its objectives and expected results. The presentation also highlighted the content structure of the workshop (TOT session and the main workshop), method of work, facilitation and other details.

On Immunization systems: The presenter described the EPI as a global programme for the control of the childhood vaccine preventable diseases. It has various components which include vaccines and their handling, cold chain to keep them potent, strategies to deliver the services, disease surveillance, social mobilization to ensure community support, monitoring and evaluation to assess the impact of the programme on disease and child mortality reduction. Like other programmes, the immunization systems are constantly undergoing internal changes, notably those related to the introduction of new vaccines and new technologies. Immunization programmes have also to face the external changes related the ongoing decentralization and other reforms in the health sector. To be able to ensure the continuity of immunization programmes, EPI staff has to understand and manage those internal and external changes. It requires specific skills in problem solving, setting priorities, decision-making, management of time, as well as human, financial and material resources. The managers of immunization programmes should be aware of the influence of the health system and the external environment on the services and factor them into planning, implementation and evaluation.

On EPI status-2005: The presenter referred to dramatic progress by the African Region in increasing routine immunization coverage during 2001-2005: the routine vaccination coverage as measured by DTP3 has improved from 54% in 2000 to 69% in 2004 (JRF, 2005). The improvement is evident in overall national coverage as well as coverage by districts. Among all reporting districts in the African Region 41% have reached DTP3 coverage beyond 80%. In looking for strategies to further increase routine immunization levels for reaching established targets, AFRO has employed a number of ways, such as providing resources to the “Big Four” countries (Angola, DRC, Ethiopia, and Nigeria), introducing the Reaching Every District (RED) strategy; and developing logistics, communication and management capacity across the Region.

On AFRO EPI Regional Strategic Plan 2006-2009: The draft 2006-2009 Regional Strategic Plan on vaccines and immunization in the African Region is concentrating efforts to assist countries to:

- Strengthen their immunization systems;
- Accelerate disease control,
- Introduce new vaccines, new concepts and technological tools.

To achieve the regional immunization objectives defined in the above strategic plan, the emphasis is placed on the following areas of action:

Immunization coverage: achieve and maintain the highest possible coverage for DTP3 (as an indicator for all EPI vaccines) at district level; integrate vitamin A supplementation into routine immunization programmes;

Disease control targets: reduction of measles mortality by 95%; eliminate neonatal tetanus and eradicate poliomyelitis (by 2006);

Innovations: provide necessary support to countries for introduction of new vaccines and technologies;

Provide support for the logistics, cold chain and vaccine management;

Strengthening national capacities to plan implement and evaluate their programmes, support training.

On Global Immunization Vision and Strategy (GIVS): The presenter indicated that in response to challenges to immunization, the WHO and UNICEF and other partners have developed the Global Immunization Vision and Strategy (GIVS) for the period 2006-2015. This strategy envisages the following developments in the coming decade:

- Protecting more people through immunization especially target populations living in hard to reach areas;
- Offering immunizations to wider age groups;

- Fostering introduction of more new vaccines in the national immunization programmes;
- Integrating immunization with other life-saving health interventions: malaria control, nutrition among others to achieve rapid reduction in child mortality;
- Ensuring equitable distribution of vaccines and necessary funds to all countries.

Huge returns are expected as a result of GIVS, especially in fulfilling Millennium Development Goal on child mortality reduction (Goal 4). According to the strategy document, by 2015 immunization could be preventing 4-5 million child deaths per year.

On Reaching Every District (RED) strategy: To achieve sustained and equitable access to good quality immunization services and accelerate progress towards the immunization goals, GAVI partners proposed a new approach called *Reaching Every District (RED) by the year 2010*, consisting of the following five operational components designed to reach at least 80% of immunization coverage in every district:

- ***Re-establishing outreach vaccination:*** regular outreach visits to underserved communities;
- ***Supportive supervision:*** on-site training by supervisors;
- ***Strengthening links between community and service;***
- ***Monitoring for action:*** using locally collected data, charts, maps, monitoring plans of action, etc.;
- ***Planning and management of resources:*** better management of human and financial resources.

In March 2003, the 80/80 goal was revised by the GAVI Board, which now calls all countries by 2010 or sooner to have routine immunization coverage at 90% nationally with at least 80% coverage in every district, hence referred to as the “90/80 goal”.

On Curriculum revision process: This elaborated presentation provided a comprehensive background on the issue highlighting foundations of curriculum development/revision process which starts its roots from defining relationships between training school and its environment. The latter refers to the health pyramid with three levels: central, intermediate and peripheral. Each of these levels needs an appropriate type of support: central level- a strategic, intermediate level- technical and the peripheral level-operational support. In addition, the environment is influenced by health policies and reforms characterized by decentralization and integration which is a common feature for many health systems in the African Region. The curriculum of the training institutions therefore should be tailored accordingly, reflecting both national and global priorities. Currently there is a growing tendency to orient the training curricula towards community needs as well as to incorporate in it the new developments in the global programme scene. These trends lead to revision of the curriculum which undergo certain stages starting from situation and need analysis, developing a new profile of the health workers and their job description to updating the curriculum itself to respond to identified changes.

On Overview of the two EPI curricula process: The presenter went through the two working documents chapter by chapter to familiarize participants with the curriculum prototypes.

On Vaccinology: The following topics were covered in the presentation:

- Immunity: a general overview;
- Types of immunity and vaccines;
- New vaccines currently in use (HepB and Hib vaccines);
- Other vaccines in pipeline (as per challenges of GIVS)

-Vaccine development and research.

The presenter mentioned that a number of new vaccines with major potential for controlling infectious diseases are at advanced stages of development. In addition, progress is being made on vaccine against meningococcal meningitis (serogroup A), which causes frequent epidemics in the African “meningitis belt”. Continuing and intensive efforts are also under way to develop effective vaccines against HIV/AIDS, malaria, dengue, leishmaniasis and shigella dysentery, among others. It is expected that all of these vaccines will be available for widely use during 2008-2009.

The presenter then went on to describe characteristics of the “ideal vaccine”:

- **Immunogenic** provoking a good immune response;
- Providing **long-lasting immunity**;
- **Safe** with no or very rare AEFIs;
- **Stable in field conditions** and can be stored reasonably long without or with a very minimum
Cold chain requirements;
- **Combined**, with several antigens producing immunity against a number of diseases;
- Administered with a **single dose**, preferably by non-injectable routes (oral, through inhalation);
- With **affordable cost** and **accessible to all**.

On Epidemiology and surveillance of VPDs: Two presenters covered this topic indicating that in line with global targets set by the WHO, the EPI has expanded focus from immunization coverage to include disease surveillance and eradication/elimination activities. Vaccine-preventable diseases remain one of the major causes of morbidity, disability and mortality in the African Region. Measles and neonatal tetanus in particular account for most of the 11.4 million deaths recorded each year among children <5 years of age. Among the reasons for this huge tall of burden are inadequate use of available cost-effective preventive measures such as immunization due to poor health infrastructure, poor planning, and lack of supervision and training of health personnel. Among the illnesses targeted by the GIVS are rotavirus diarrhea, pneumococcal disease, and cervical cancer with high number of annual deaths, most of them in developing countries.

Epidemiological surveillance provides information for early detection of outbreaks thus facilitating preparedness for response. Currently, many intervention programmes have their own disease surveillance system. Each programme has made efforts through the years to improve its ability to collect programme-specific data for action. It has been observed, however, that these systems involve in many instances similar functions, especially at district and health facility levels. They often use the same structures, personnel, transport and other resources. To increase cost efficiency and save human and material resources, integrated disease surveillance and response (IDSR) approach was recommended for the countries of African Region by AFRO. The latter covers 19 diseases prevalent in the Region categorized into 3 groups which include most of the EPI target diseases:

- (i) **Epidemic-prone diseases:** cholera, diarrhoea with blood (Shigella), measles, meningitis, plague, viral haemorrhagic fevers, yellow fever;
- (ii) **Diseases targeted for eradication/elimination:** poliomyelitis, neonatal tetanus, dracunculiasis, leprosy;
- (iii) **Other diseases of public health importance:** diarrhea, pneumonia in <5 children, new AIDS cases, malaria, onchocerciasis, STIs, trypanosomiasis, tuberculosis.

Each country is encouraged to prioritize the diseases depending on their communicable diseases profile and keep the list to the minimum possible to ensure that it is manageable by the system.

On Immunisation service delivery: The following topics were presented under this title:

- Target groups for immunization;

- National immunization schedule;
- Administration of vaccines;
- Cold chain and logistics;
- Simultaneous administration of vaccines;
- Contraindications to immunization;
- Missed opportunities
- Community information and participation.

On MLM/IIP modules: As a result of pressure during 1999-2000 coming from the country programme reviews and EPI managers themselves, the need for revision/development of MLM course has become apparent. In developing the course, AFRO used 1991 global MLM course materials, other sources on general health management as well as new updated reference materials from Internet. The review of the modules for mid-level staff was justified by the various changes and innovations in the health sector and EPI itself influencing the immunization policies and practice. The presenter informed participants that as a result of this revision, currently there is a set of well elaborated, structured and learner-friendly modules developed by AFRO which have undergone a series of testing, validation by experts and MLM course participants. They were well adapted and were unique for African region. Some countries adapted AFRO MLM modules to suit their country situation. The course is available on CD for course participants.

The “Immunisation in Practice” is an 8 module WHO publication intended for health workers who regularly administer vaccines to women and children. They contain information on diseases that feature in most immunisation programmes and guidelines on the handling of vaccines, maintenance of the cold chain, injection safety, planning and management of immunisation sessions with a support of the community, administration of immunisations and monitoring of immunization coverage. This course is suitable for training of health facility staff and is also available for participants in CD.

7.2 Individual country presentations

A sub-session was organized within the workshop programme to give opportunity to country delegates to bring in their experiences in EPI teaching. Fifteen countries made power point presentations on their experiences: Burkina Faso, Burundi, Cameroon, DRC/Congo, Cote d’Ivoire, Ethiopia, Ghana, Kenya, Niger, Republic of South Africa, Tanzania, Togo, Uganda, Zambia, and Zimbabwe. The AMP (Association Medicine Preventive) also made a presentation on its training activities in Western Africa for GAVI eligible countries (the CD-Rom indicated in the Footnote 1 includes all these presentations).

Some countries in the “BIG FOUR” group, Angola and Nigeria were notable by their absence; Ethiopia, with two participants, was under-represented in comparison to the size of the country. DRC had a national workshop last year, and is the first country in AFR to have adapted the WHO/AFRO guidelines to their national curricula.

Country presentations were followed with questions, clarifications and discussions which facilitated the exchange of experiences among participants. Discussions covered a number of important topics related to the workshop objectives. They are integrated within the chapter 9 of this report.

8. Questions and answers

The following questions were put by the national participants during plenary discussions which were answered by facilitators:

Q. What is the baseline year for MDG4? 1990 or 2000?

A. 1990

Q. Why are the polio deadlines constantly retreating from one year to the other?

A. Because the virus is responding less quickly to SIAs than planned. We shall concentrate on Nigeria in 2006 where SIA quality has been suboptimal.

Q. (Comments in the form of a set of questions). The MDGs cover many areas. What is then priority of priorities? Where does IMCI fit into the other interventions? Are we getting a multiplicity of interventions?

Q. In Zimbabwe HIV/AIDS has a high priority; the EPI seems to be of secondary issue. So are we going to include it in the list of strategic priorities?

A. Yes, HIV is a priority, but those infected or sick children need more protection from child killer diseases (e.g. measles) than their healthy counterparts because their immune system is severely compromised by the HIV.

Q. You mentioned a lot of vaccines in pipeline. Is the human body able to respond to so many antigen?

A. Yes, it can. As mentioned in Prof. Ndumbe's presentation, the human body already gives adequate responses to combination and some single vaccines in the current immunization schedule having 8-9 antigens (BCG, DPT, Polio-types 1,2,3, Measles, Yellow fever, HepB and Hib).

Q. What are the terms of reference (TOR) of Interagency Coordinating Committee (ICC)?

A. This is the committee which brings together national authorities and partners in immunization. The ICC has quarterly or semiannual meetings to review EPI progress. It is a decision making body chaired by the minister or his or her delegated high official. Its TOR includes advocacy, resource mobilization, planning and monitoring of EPI activities.

Q. What is the level of co-financing for new vaccines and who is going to pay for new vaccines?

A. As laid out in the October 2005 letters from the GAVI secretariat to individual health ministers. GAVI position is that countries should be prepared to purchase their EPI vaccines by gradually increasing their contribution to the cost of vaccines..

Q. What is the number of pre-qualified pentavalent suppliers?

A. One. Glaxo SmithKline, Rixensart, Belgium.

Q. What are the financial commitments of UNICEF and other partner agencies?

A. UNICEF financing of EPI+ amounted to \$293 million in 2004 and to \$350 million in 2005, mostly in the area of routine services. Half these resources were spent in Africa, largely on accelerated disease control. We are developing an EPI Plan of Action for 2006-2009, in harmony with the WHO plan, to assure proper delineation of the respective partners' roles.

Q. Which countries give antihelminthics during pregnancy?

A. Togo and DRC (to be confirmed by correspondence with the country offices).

9. Comments and Discussions

After presentations on the new trends and developments in EPI, and in the course of group work, the participants made several comments, suggestions (**Annex 3**) which are synthesized and grouped below under three areas:

- General discussions on the immunization context and training;
- Discussions on working documents (Prototype curricula); and
- Revised curriculum implementation plan or the way forward.

9.1 General and group discussions on the immunization context and training

Linkages with the community

Many presenters and participants underlined the importance of linkages between teaching content and immunization operations at field level. Revised curricula of the training institutions must therefore ensure that health workers operate as a team, respond adequately to current developments and needs in immunization and other programmes. In addition, the curricula should be oriented towards community needs to cultivate respect and desire among students to work closely with the community and at the service delivery points. Field attachments and practicals, therefore, should be carefully planned and supervised by the institution to achieve these goals.

National health system and globalization

The issue of interrelationships between national health systems and globalization (UN General Assembly, WHO and UNICEF Governing Body resolutions such as related to MDGs, GIVS, RED approach, etc.) was raised. The suggestion was that to be relevant training institutions should be familiar with the global and national general health context, national policy changes, health reform processes in the country and elsewhere. Subsequently, during curriculum revision process both global and national orientations, major decisions and policy updates should be taken into consideration and given a prominent place in the revised curriculum.

Dialogue between stakeholders

Participants agreed that medical schools and ministries of health, being principal stakeholders in training, require more dialogue to ensure share responsibilities for pre-service training. Medical schools have to be proactive and stimulate the dialogue. The WHO will be required to advise Governments on the role of medical schools and faculties in producing adequate and skilled health professionals for formulation, implementation and the follow-up of policies and national health strategic plans.

Involving private sector

- It has been observed that in many countries involvement of private sector including faith institutions in service provision as well as in training is considerable. It is therefore imperative to train teachers of private sector in new developments in the immunization programme and involve them in curriculum revision process.
- We should not always invest in public institutions and abandon private sector whose contribution in some countries in service delivery may reach >50%.
- It frequently happens that the teachers teaching in public institutions end up with training in private schools.
- The exams on immunization programme should be the same for both institutions.

- Criteria for selection of practical sites should be developed and coaching staff updated on EPI developments.
- Certain private institutions offer incentives to health facilities to accommodate their practicals/field attachments of the students. This practice affects practical training programme of public training institutions as no other nearby facility is available for their students.

Integrated training

The issue on integration in training initiated lengthy discussions. The conclusion was that integrated training and services for the African Region is a must and in near future even management training on EPI (MLM) will be replaced with health service mid-level management (MLM) training. However in the integrated training package the participating programmes will not be diluted but should have their essential content topics, norms and standards to ensure quality of services to the population.

Time allocation to EPI teaching

EPI being one of the leading child survival programmes should be given ample time in the curriculum.

Immunization agents and others

- From discussions with nationals, it was apparent that in today's working environment, vaccinations are often done by those, such as auxiliaries and health assistants, who did not study EPI in their basic training. Health ministries should attempt to place vaccination in the hands of trained nursing personnel; when this is not possible, they should consider whether non-nursing staff should give vaccinations and, if so, how. However the use of non-nursing staff as vaccinators poses important statutory issues in many countries which should be resolved by countries themselves.
- In some countries, persons like health assistants, without EPI training, are pressed into service as vaccinators. This problem will not go away, and has to be solved by on the job training or revision of their curricula.
- Due to staff shortages at service delivery levels in some countries social workers have been involved in immunization. Most of the participants expressed opinion that social workers are not immunisation agents and should not perform immunization by injectable vaccines but can contribute in social mobilization, advocacy, training, defaulter tracing as well as, if necessary, administering oral vaccines. It is therefore important to include immunization in their training curriculum.

In-country training

In order to create a critical mass of EPI trained teachers within the national training institutions, in-country training should be reinforced and enhanced. The range of target audience should also be expanded to include microbiologists, community health teachers, etc. More participants from large countries should be trained at WHO Inter-country MLM courses.

The post-polio era

Pr. Ndumbe, who also chairs the Task Force on Immunization, indicated that in the beginning of polio eradication initiative some countries argued that there are other, more dangerous diseases than polio. Now all are convinced on eradication benefits because returns of investments can be shifted to other diseases control. However he raised two pertinent issues about the post-polio period to be considered by WHO, UNICEF and other partners involved in polio eradication initiative:

- The post-OPV vaccination policy during the transitional period after interruption of wild

- polio vaccine transmission, as inactivated polio vaccine use continues in some countries.
- Fate of EPI disease surveillance after AFP surveillance ends.

Dropout and Vaccine management

The individual presentations all had one thing in common: all countries omitted mention of dropout rates and how to deal with them. In the opinion of a facilitator, this is a serious omission. Also omitted was any mention of stock control and vaccine wastage. If these topics do not appear in the pre-service courses, this would help to explain three problems seen in most African programmes: high dropout rates, high vaccine wastage, and vaccine stockouts.

In-service training

At many training institutions EPI training is done in a staggered manner by different departments and in different years within the overall training programme. By the time students reach their graduation, many changes and innovations may take place in the immunization programme. Therefore the governments should ensure continuous in-service training of qualified health personnel to keep them updated on programme developments.

Database on training activities

It is important to establish updated database on immunization training activities. Some countries have an integrated database on training at their HRD/MOH departments (e.g. Ghana). It is useful for the EPI manager to extract the EPI section of the database for his/her office and use it when planning the training/retraining of qualified health staff.

Evidence based research

The participants also touched the need of operational research which should be incorporated in the curriculum. The research can help to evaluate the impact of training or to verify immunization coverage data and provide evidence on other aspects of EPI.

9.2 Discussions on working documents (Prototype curricula)

This section covers major discussion points/suggestions related to the review of the documents by groups and in the plenary. Review details by individual groups are presented in **Annex 3**.

Prototype curricula

The endpoint of this exercise, the first of its kind since AFRO restarted Inter-country MLM trainings in 2000, is the integration of current EPI materials into existing medical, nursing and midwifery curricula.

All four working groups in their presentation and through evaluation questionnaire indicated that the prototype curricula documents prepared by AFRO and NESI are comprehensive, technically sound and therefore will assist those governments which want to update their teaching curricula. Participants urge that this document, which is adequate to training needs, be finalized taking into consideration comments made during plenary and group sessions.

Teaching various category of medical students

Prototype curriculum should differentiate various categories of medical students. It is proposed to refer to at least 3 categories of students: **General Medicine, Specialist Medicine and Public Health/Community Medicine**. Similarly, the students in nursing schools can be categorised in **State Registered Nurses/Midwives and Enrolled Nurses**. All these categories should learn the same topics, however the intensity of training should differ from one category to another. The intensity of training for these students can be expressed using scoring method (from “+” to

“+++”). It is also important to show differences in time allocation to different categories of students.

Mobile teams

In the section on service delivery strategies, along with fixed, outreach strategies and campaigns (SIAs), mobile strategy should be included as in Sahelian countries it is used to reach remote communities.

Practicals

Replace “Field Visits” with “Practicals”. The rationale for this proposal is that field visits with short duration (3-6 hours) will cause logistic problem for the institution (transport, etc.) or disrupt the training process whereas practicals can be organised within the facility of training institution (in the classroom or at base clinic/hospital).

“Piggybacking”

One of the facilitators observed that no training is complete without a module, or at least a session, on “piggybacked” interventions like vitamin A, deworming, and promotion of birth spacing. Even recent MLM modules do not, in some cases, reflect vaccine associations which have become popular in the wake of the child survival. The absence of deworming from both WHO and UNICEF documents is remarkable, even as UNICEF purchases by ESAR country offices continue to double every year. Based on participant responses, WCAR is farther ahead in deworming than ESAR. Togo and DRC participants stated that deworming is done during prenatal consultations in their countries.

Vitamin A

To prevent confusion among students, the text on vitamin A should be dealt with separately from vaccine preventable diseases.

9.3 Discussions on implementation plan of the revised curriculum or the way forward

Opportunities for a change

Members of Francophone groups indicated that most of the training institutions are currently undergoing reform which is a good opportunity to provide technical assistance for revision of their curriculum. In the facilitators’ meeting there was a suggestion in this regard to identify some participants to be recruited for supporting other countries.

Fear not

In the opinion of one facilitator (UNICEF), this workshop put paid to the fears that medical faculties would be hidebound and resistant to change. The departments represented, mostly pediatrics, social medicine, and public health, do not fit that description, and all participants were keen to update their curricula in the light of new knowledge.

Partner support

Curriculum revision process should be supported by immunization partners. Since WHO and UNICEF take the lead on this activity, the main take home message to our country offices is the need, when requested, to provide technical and financial support to training institutions which seek partner support in incorporating EPI into their existing medical, nursing and midwifery curricula.

Major action points

- The groups felt that a steering sub-committee is needed to integrate EPI, with revisions into existing curricula.

- A country wide capacity building workshop is needed for trainers, using the MLM approach.
- National workshops needed to validate the WHO/AFRO prototype curricula.
- By mid-2007, training of trainers on the revised curriculum should be completed and revised curriculum introduced
- This will be followed by half yearly monitoring and supervisory visits.
- By 2008, a review should be done to look at effects of the updated curriculum on pre-service training.
- The final evaluation should take place in 2010.

Proposed action plan format on revised curriculum introduction

Introduction (Justification, rationale for revision of curriculum)

Objectives of the revised curriculum

Targets specifying achievements/milestones in measurable terms

Strategies describing how objectives and targets will be met

Specific activities indicating:

- Who is responsible to carry out the activity
- When the activity will be carried out
- Where the activity will be carried out
- Estimated cost of the activity
- Resources available/gaps
- Expected source to cover the gap

Budget of the plan based on cost of each activity

Gantt Chronogram/Activity schedule

Monitoring and evaluation of the plan including specific indicators

10. Other issues and useful announcements

By a show of hands, about 2/3 of the participants have Internet access. This means that, at least in teaching institutions, most recipients can follow a web link included in CD-ROMs or E-mails.

Dr. Mutabaruka, as an Immunization Capacity Building Officer within WHO Immunization and Vaccine Development (IVD) Unit in Harare, encouraged participants to keep in touch with his office and share their achievements and constraints on the way of implementing their revised curriculum implementation plan. He promised to give them all technical support and advice to overcome possible constraints in a spirit of partnership and collaboration.

The existing set of MLM modules is being completed by WHO with a production of new modules on transport, equipment maintenance, and costing/financing/resource mobilization.

The Immunization in Practice series was distributed as CD-ROMs. The IIP modules are for the training of health facility staff that plan and organize vaccination sessions, covering, among other topics, target diseases, schedules, cold chain, monitoring and use of data, building community support for vaccination, and injection safety. The Immunization in Practice training course, also available on the WHO homepage (www.who.int/vaccines-documents), should also get priority, especially in countries which have suffered high turnover of peripheral level health workers.

USAID has French and English versions of “Immunization Essentials” for distribution to interested parties. Anyone wanting copies, in print or CD ROM form, should write directly to aweaver@usaid.gov

During the plenary discussion, Dr. Mutabaruka, WHO/AFRO, proposed the creation of a regional steering committee for EPI curriculum integration, including such agencies as WHO/AFRO, NESI, ESARO (R. Davis), WCARO (C. Costa), as well as national steering committees for EPI curriculum integration, to include members from WHO, UNICEF and the government.

11. Immediate actions to be taken by participants after the workshop

The workshop generated enthusiasm and readiness for action among participants on their return to their respective countries. In a collective manner, facilitators and participants developed a framework for immediate action as follows:

Immediate steps by workshop participants

Step I Debrief/provide feedback to national authorities.

- 1.1 Prepare a report to MOH/Dean of faculty/Director of training school
- 1.2 Feedback on the workshop to colleagues of training institution, national EPI team, national training committee, HRD/MOH, ICC technical committee, other partners, etc.

Useful tips: Provide debriefing as a team (with colleagues who attended the workshop)

Use the following tools for reporting and feedback:

- Agenda of the Consensus Workshop
- Prototype curriculum documents
- List of workshop participants
- Workshop recommendations/Summary report
- Draft plan of action for introduction of curriculum.

Step II Analyze the situation on immunization teaching where appropriate

Step III Arrange a sensitization seminar

Useful tips:

Step IV Establish a stirring sub/committee on immunization training

Step V Adapt generic plan of action prepared by workshop participants to the local situation

Subsequent steps in which the participants should play a leading role:

Step VI Mobilize resources:

Useful tips:

- Look first available resources within the training institution
- Consult with national EPI Manager on available national and partner funding for EPI training (WHO, UNICEF, USAID, AMP, etc.)
- Convert your plan of curriculum introduction into project proposal
- Submit your proposals to WHO, UNICEF, UNESCO, AMP, NESI, USAID, etc. for external funding.

Step VII Draft/update/revise EPI curriculum

Step VIII Initiate a workshop on integration/harmonization of EPI curriculum with other teaching programmes

Step IX Arrange a short (2-3-day) seminar for teachers on pedagogical skills specific to EPI teaching

Step X Adapt EPI training modules (e.g. AFRO/MLM or IIP/WHO HQ) to local situation

Step XI Ensure availability of necessary teaching aids and audio-visual materials

Step X Introduction/implementation of the Curriculum

Step XI Monitoring and supervision

Step XII Evaluation

- Mid-term: after the first 3 years of the introduction;
- Long-term: by 2010

12. Evaluation of the Workshop (Daily and End-of-workshop overall Evaluation)

Various forms of evaluations were used during the workshop. These included:

- Diagnostic** evaluation in the form of initial Q-A technique to measure the level of familiarity of the audience with immunization concepts and terminology. It also helped to identify the number of teachers/professors and other participants who has undergone EPI MLM training.
- Daily evaluation** using special questionnaire for each individual participant. These questionnaires were distributed to participants at the end of daily sessions and collected for consolidation and analyses to be presented at the beginning of the next day sessions. There was an advantage to use this method as it showed the progression of the workshop as regards to content, facilitation, administrative arrangements and other aspects of the workshop.
- Final evaluation** at the end of the workshop was conducted encompassing participants' global impressions and gained experiences/lessons during the entire workshop. The questionnaires also included sections for comments and observations which were shared with participants by the presenter. The Likert scale to calculate the Satisfactory Index was used for both daily and final evaluations, and the threshold for satisfaction was determined by $\geq 70\%$ level. As can be seen from the graphs in the Annex 5, the satisfaction rates for all components of the workshop was very high (except for meals which was at the minimum of the threshold level).

13. Accomplishment of the Objectives

Objective	Accomplishment
1. To update participants on the current immunization policies/strategies including Global Immunization Vision and Strategy (GIVS).	Fully accomplished: -A series of presentations were made during the first session on current EPI policies and innovations (8 presentations) followed by discussions and clarifications. - A specific presentation addressed challenges brought forward by GIVS, Reaching Every District (RED) strategy and Millennium Development Goals (MDGs).
2. To get a consensus on the EPI curricula prototypes for Medical, Nursing and Midwifery Schools in the WHO African Region.	Fully accomplished: -Intensive discussions during 2 days in 4 groups, group presentations in plenary, exchange of national experiences etc. ensured consensus building as regards curriculum content, modalities of its application, allocated time and teaching/learning methodology of each content element. -In addition, groups made essential revision and editing of the core working document (prototype curriculum) which can be

	disseminated by AFRO after introduction of proposed changes.
3. To make recommendations for the implementation of the EPI curricula revision process within the African health pre-service training institutions.	<p>Fully accomplished:</p> <ul style="list-style-type: none"> -A number of specific recommendations were made by participants to facilitate smooth introduction of EPI revised curriculum in the training institutions in the Region. -An action plan to this effect was also elaborated by participants as a guidelines to assist them for adaptation of the plan in their respective countries.

14. Recommendations of the workshop participants

Dr. E. Mutabaruka, the Director and the Chairman of the workshop used an innovative technique to harmonize and consolidate recommendations from various working groups (**Annex 4**). The consolidated recommendations based on group discussions are presented below.

RECOMMENDATIONS OF THE CONSENSUS WORKSHOP ON EPI CURRICULA FOR MEDICAL AND NURSING/MIDWIFERY SCHOOLS IN THE AFRICAN REGION DOUALA, CAMEROON, 13-17 MARCH 2006

Preamble :

1. Given the interrelation between health and development ;
2. Given the significant burden of vaccine preventable diseases on the health of the population and on children and mothers in particular ;
3. In view of the Millennium Goals, notably 4 and 5 ;
4. Taking into account the importance of vaccination as one of the essential components of primary health care;
5. Given the necessity to increase immunization coverage to the level suggested by the MDG and the GIVS ;
6. Taking into account the important role that human resources play for health to increasing immunization coverage ;
7. Taking into consideration the immunization training needs assessment as identified in various countries notably the updating and revision of curricula of training schools ;
8. Recognizing the significant input of private and faith based institutions in EPI service delivery and training;
9. Given that the EPI curriculum should be taught in close collaboration with the Departments of Pediatrics and Child Health, Community/Public Health, Microbiology, Nursing and other EPI-related disciplines;
10. Given the availability of the consensual immunization curricula content

We, the participants of the consensus workshop on EPI curricula prototypes for medical and nursing/midwifery schools in the African Region, Douala, Cameroon, 13-17 March 2006, formulate the following recommendations:

To Ministries of Health, of Education, and Training Institutions:

- Put in place a consultative platform regrouping representatives of the ministries of Health, Education, training institutions and partners to assist nurses/midwifery schools and faculties of medicine in the implementation of action plans for revision and updating of EPI curricula. Training institutions should establish a subcommittee in charge of piloting the introduction of the EPI curricula on the follow-up of the implementation.
- Put in place/reinforce the centres for EPI practicals within health structures.

To Ministries of Health and Education:

- Training institutions should be supported with training materials and teaching/learning aids especially laptops, printers, photocopiers, LCD projectors including internet connectivity;

- Organize national MLM courses and other courses on EPI for teachers and training supervisors of public and private schools including paediatricians, public health and community specialists and others who are involved in immunization teaching ;

To Partners :

- Support plan of action on revision/adaptation of EPI curricula in the training institutions by providing technical and financial support in training on MLM of teachers and supervisors of these training schools

To Directors of training institutions:

- Integrate the revision/updating of EPI curriculum in the ongoing reform in the faculties of medicine and nursing/midwifery schools in some African countries by allotting sufficient time for theory and practice for vaccination content based on analysis of training needs assessment;

To Participants of the Douala Workshop:

- Create a network of teachers in order to exchange experience and information on EPI
- Provide feedback to national authorities and colleagues on the Douala workshop content related to revision and updating of EPI curricula
- Involve themselves effectively in the process of EPI curricula revision and updating by encouraging the creation of a standing committee.

Douala, 17 March 2006

Annex 1

**ATELIER DE CONSENSUS SUR LES PROTOTYPES DE CURRICULA PEV POUR LES ECOLES MEDICALES
ET D'INFIRMIERS/SAGE FEMMES DANS LA REGION AFRICAINE
Douala, Cameroun, 13 au 17 Mars 2006**

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Annexe 2

CONSENSUS WORKSHOP ON EPI CURRICULA PROTOTYPES FOR MEDICAL AND NURSING/MIDWIFERY SCHOOLS IN THE AFRICAN REGION Douala, Cameroon, 13 to 17 March 2006

TENTATIVE AGENDA

1st day: Monday, 13 March 2006

Specific objectives:

1. To update participants on the actual immunization policy and strategies, including GIVS
2. To get a consensus on the EPI curricula prototypes as proposed for both medical and nursing /midwifery schools in the African Region

8H00 –9H00	Registration of participants - Administrative announcements - Opening ceremony - Workshop syllabus	Secretariat AO/ Cameroon /Dr Maiga Pr Ndumbe/Dr Maiga Dr Mutabaruka
9H00 – 11h00	- Immunization systems - GIVS - Overview of EPI Status 2005 - <i>AFRO EPI Regional Strategic Plan 2006-2009</i> - <i>RED</i>	Dr Maiga/Dr Ambendet Dr Maiga/Dr Mutabaruka/ R. Davis Dr Maiga/Dr Mutabaruka Dr Maiga/Dr Mutabaruka Dr/Ambendet/Dr Mihigo/ Dr Anya Blanche
11H00 – 11H30	Coffee break	
11H30 – 1300	- Curriculum Revision process - Overview of the two EPI curricula prototypes	Dr Mutabaruka Dr Arevshatian
13H00 – 14H30	Lunch Break	
14H30 – 15h00	EPI Curriculum Part II on Vaccinology	Prof. P. Ndumbe/ Prof. Hoosen
15H00 – 15H30	EPI Curriculum Part III on Epidemiology of VPDs	Prof. Hoosen/ Dr Caboré/AMP/Dr Arevshatian
15H30 – 16H00	EPI Curriculum Part IV on Immunization service delivery	Dr Maiga/ Dr Mihigo/Dr Ambendet/Dr B. Anya/ R Davis
16H00 – 16H30	Coffe break	
16H30 - 17h00	EPI Curriculum on MLM/IIP	Dr Mutabaruka/ Dr Amendet/R. Davis/ Dr Maiga/Dr Mihigo/Dr B. Anya/Dr J. Caboré
17H00 – 18H00	- Introduction to Group work - Group work: organization	Dr Mutabaruka/ Facilitators/ Participants
<p>2nd day: Tuesday, 14 March 2006 <u>Objective:</u> <i>To get a consensus on the EPI curricula prototypes as proposed for both medical and nursing /midwifery schools in the African Region</i></p>		
8H00 – 13H00	Group work + Coffee break	Participants & Facilitators

13H00 – 14H30	Lunch break	
14H30 – 18H00	Group work (cont'd) + Coffee break	Participants & Facilitators
3rd day: Wednesday, 15 March 2006 <u>Objective:</u> <i>To get a consensus on the EPI curricula prototypes as proposed for both medical and nursing /midwifery schools in the African Region</i>		
8H00 – 13H00	Group work + Coffee break	Participants & Facilitators
13H00 – 14H30	Lunch break	
14H30 – 18H00	Group work (cont'd) + Coffee break	Participants & Facilitators
4th day: Thursday, 16 March 2006 <u>Objective:</u> <i>To get a consensus on the EPI curricula prototypes as proposed for both medical and nursing /midwifery schools in the African Region</i>		
8H00 – 13H00	Plenary sessions + Coffee break	Participants & Facilitators
13H00 – 14H30	Lunch break	
14H30 – 18H00	Plenary sessions (cont'd) + Coffee break	Participants & Facilitators
5th day: Friday, 17 March 2006 <u>Objective:</u> <i>To make recommendations for the implementation of the EPI curricula revision process within the African health pre-service training institutions</i>		
8H00 – 8H30	Evaluation of the workshop	Participants
8H30 – 10H30	Group work on Way forward & recommendations	Participants and Facilitators
10H30 – 11H00	Coffee break	
11H00 – 12H00	Plenary session on recommendations	Participants and Facilitators
12H00 -13H00	Closing ceremony	Prof Ndumbe/ WR/Cameroon

Annex 3: Review and Comments by working groups on the prototype curricula

Day 3: Presentation by Anglophone Group, Medical Curricula

Rapporteur, Dr Emmanuel ADDO-YOBBO, Kwame Nkrumah University of Science and Technology

-Most students become house officers, then DMOs of health, without any training on the way. So it is best to get them trained in EPI before they leave medical school. All parts of the EPI training should be available to the medical student, since he may end up doing anything.

-The house officer needs a few basic competencies. Medical officers, medical specialists and public health specialists need different levels of knowledge for the main areas of practice, as listed below. One, two and three +s indicate basic, intermediate and advanced knowledge.

Category → Content↓	Medical Officer	Medical specialist	Public health specialist
Vaccinology	++	+++	++
Current & new vaccines	++	+++	+++
Immunization safety	+++	++	+++
Waste disposal	++	+++	++
Vaccine Preventable Diseases	++	+++	++
EPI Management	++	+	+++
Communication	++	++	+++
Immunization Practice	+++	++	+++
Logistics and Cold Chain Management	+++	++	+++
EPI Policies/Strategic Docs	++	++	+++

-The practical on immunization practice and immunization safety will be conducted at the same time, for a total of 2 ½ hours.

-Field postings should be structured to provide practical exposure of 30 hours or more. Field work and projects will be undertaken during field postings in an integrated manner with other projects.

Presentation by Francophone Group, Medical Curricula

Rapporteurs, Drs. E Marius Ouendo and J.C. Gody

-There was a discussion among the participants about the pertinence of different themes in different specialties. All agreed that the prototype was adequate to training needs.

-The draft matrix formed the basis for a detailed time analysis, in minutes, of the period required for each subject covered in the prototype curriculum.

-The mobile team strategy needs inclusion, especially for the Sahel countries.

-Vitamin A deficiency should be listed separately, not as a vaccine preventable disease.

-The idea of “valid doses” was missing from the prototype documents.

-The term “caregiver” (*tuteur*) is less appropriate than “caregivers/parents,” since parents most commonly accompany the children to the vaccination session.

-The EPI target diseases should include, for example, rotavirus and pneumococcal disease.

-Conjugate vaccines should go into the list of vaccines.

-The word “motivate,” with its financial undertones, should be abandoned in favor of “mobilize.”

-Duration of training by medical specialty:

-GPs, 17 hours, with EPI training as part of community training

-Specialists, 15 hours, with workshops on special subjects

-Public health specialist, 20 hours, integrate EPI to other modules of community medicine

Presentation by Francophone Group, Nursing and Midwifery Curricula

This group went through the prototype matrix.

- They found individual reading, followed by group discussion, to be a useful teaching method, which they regarded as under-represented in the matrix as written; same observation on field visits to observe vaccination sessions.
- The matrix should include mumps, rubella, and rotavirus, and should consider EPI target diseases and their surveillance together.
- Training should distinguish among active, passive and community based surveillance.
- Vaccine forecasting should go into the training; so should the arrangement of vaccines in the refrigerator.
- The group wanted a more detailed discussion of vaccines, storage, posology, volume, freeze dried products, vaccine presentations, etc., and more discussion of cold chain management. They wanted more detail on preparation of vaccination sessions.

Presentation by Anglophone Group, Nursing and Midwifery Curricula

Rapporteur, Winifred Tabaaro

The group considered the content of the prototype to be appropriate and comprehensive.

- Two levels of training are needed, one for enrolled nurse/midwife, who is an implementer, and one for the registered nurse/midwife/registered community nurse, who is a manager. The latter category needs more training time, since they must train and supervise the former.
- The group broke down the training table into two columns with different time allocations for implementers and managers.
- The group made many individual comments on the curriculum prototype, with cold chain and vaccine management nearer to the front. Where national and W.H.O. schedules are at variance with each other, both should appear.
- The following topics were thought to need more emphasis.
 - Interpersonal relationships between clients and health workers
 - Description of communication skills
 - Roles of the communities in the delivery of immunization services

Day 4: Reports of the 4 working groups: Curriculum implementation plan and follow up

Anglophone Medical Training Group

- The workshop participants should, by May 2006, make reports to their respective training institutions, with budgets, copying potential donors. Courses should start by August 2006.
- Within medical faculties, departments need to agree on the content of the revised training curricula for medical students. This may require W.H.O. participation. EPI managers cannot do this on their own, but should participate in the process.
- The creation of EPI teaching teams may be indicated.
- By January 2007, the interdepartmental revision meeting should take place.
- TALIF (The Teaching and Learning Innovation Fund) may be a funding source.

Recommendations:

- Train a wider group of staff in MLM
- Reinforce and enhance in-country MLM training
- WHO country offices and EPI managers should play a major role in the curriculum reform process
- Training materials and teaching aids, especially laptops, printers and LCD projectors should be part of the essential teaching tools
- It would be ideal to teach EPI as a unit. However, current teaching programmes involving other departments are tight. EPI should be taught in a staggered manner, involving different departments, including Community Health, Microbiology and Pediatrics

Francophone Medical Training Group

- A steering committee is needed to integrate EPI, with revisions, into existing curricula.

-National workshops like that organized in DRC last year are needed to validate the WHO/AFRO prototype curricula.

-By mid-2007, training of trainers should be completed. Evaluate the process in 2008, then again in 2010.

Recommendations:

- **For medical and nursing schools:** actively support the process of EPI curriculum reform
- **For MoH:**
 - Create a platform for collaboration with the training institutions
 - Offer human, financial and didactic support to training institutions
- **For Ministry of Higher Education:** integration, revision of EPI curriculum
- **For WHO, UNICEF and other partners:** Finalize the prototype; offer support needed for curriculum reform
- **To participants:** share the results of this workshop with the appropriate authorities in home countries

Francophone Nursing and Midwifery Training Group

Next steps, 2006 and 2007

1. Situation analysis of current curricula
2. Update of curricula
3. Advocacy for EPI integration into curricula
4. Capacity building, teaching staff
5. Teaching of EPI in nursing and midwifery schools
6. Partnership between training schools and EPI
7. Monitoring and Evaluation

Recommendations:

- **To partners:** support governments in MLM training for teaching staff; support organization of national workshops as follow-up to the Douala workshop
- **To the countries:** equip the teaching institutions with materials and equipment needed for training in EPI; organize the MLM courses at national levels for teaching staff; involve teaching staff in workshops and training meetings for EPI; support revision of curricula in training institutions

Anglophone Nursing and Midwifery Training Group

Next Steps, all proposed for 2006:

1. Sensitization meeting for stakeholders
2. Advocacy meetings with statutory bodies
3. Technical consensus meetings
4. Planning for inclusion in pre-service curriculum
5. planning meetings
6. Proposal writing
7. Presentation of proposals to funders
8. Getting training materials

A country wide capacity building workshop is needed for trainers, using the MLM approach. This will be followed by half yearly monitoring and supervisory visits. By 2008, an evaluation should be done to look at impact of the programme on pre-service training.

Funding will come from government and partners, such as W.H.O. and UNICEF.

Recommendations:

- The immunization curriculum should only apply to professional nurse/midwife trainees.
- Countries that are able to initiate the incorporation of this curriculum content into their programmes can do so immediately.
- Countries should be guided by the formal process of introducing the prototype EPI curriculum for preservice training in line with action plan.
- The government should do continuous in-service training for qualified staff.

Annex 4: Contribution of working groups to overall workshop recommendations

Medical Training, Anglophone Group

- ✓ Need to train a wider group of staff in MLM to involve Community Health Teachers and Microbiologists as well.
- ✓ Reinforce and enhance in-country MLM training.
- ✓ It would be ideal to teach as unit. However, current teaching programmes involve other departments and are tight.
Suggest that it should be taught in a staggered manner but in collaboration with the Departments of Community Health and Microbiology.
- ✓ WHO Country Offices and EPI Managers should play a major role in the curriculum reform process.
- ✓ Training materials and teaching aids especially laptops, printers and LCD projectors should be part of essential teaching tools.

Medical Training, Francophone Group

- ***For the Ministry of Health***
 - ✓ Set in place a mechanism of collaboration with the ministry of education/higher learning for the schools and faculties of medicine to complete the revision/updating of EPI curricula and their effective application
 - ✓ Offer material, human and financial support to the process of revising and updating EPI curricula
- ***For the Ministry of Education/Higher Learning***
- Integrate the revision/updating of EPI curriculum in the revision of the medical faculties' curricula currently underway in certain African countries
 - ✓ Set in place a platform of collaboration with the Ministry of Health to assist the schools/faculties of medicine to conclude the revision/updating of EPI curricula and their effective application
 - ✓ Offer material, human and financial support needed for the process of revision/updating of EPI curricula
- ***To partners*** in health development (W.H.O., UNICEF, etc.)
 - ✓ Finalize and make available the prototype of the EPI curriculum in the different countries of the African region
 - ✓ Offer the human, material and financial support needed for the process of integration and implementation of the EPI curricula
 - ✓ Encourage the countries to set in place EPI centers in already existing structures
- ***To participants*** in the workshop on EPI Curricula Prototypes Workshop, Douala
 - ✓ Convey to authorities and colleagues the content of the Douala workshop on revision and updating of EPI curricula
 - ✓ Get involved effectively in the process of revision and updating of EPI curricula

Nursing Training, Anglophone Group

- ✓ In order to maintain standards, the immunization curriculum should only apply to professional pre-service nurse/midwife trainees
- ✓ Countries that are able to initiate the incorporation of this curriculum content into their programs can do so immediately.
- ✓ Countries be guided by the formal process of introducing the prototype EPI curriculum for pre – service training as per action plan

Nursing Training, Francophone Group

- ***To the partners***
 - ✓ Support governments in MLM trainings of instructors and training staff in training schools
 - ✓ Support the organization of workshops on curriculum consensus with EPI and with training schools
- ***To the countries***

- ✓ Supply training institutions with suitable pedagogical materials for EPI instruction
- ✓ Organize national EPI courses for instructors and supervisors
- ✓ Involved the instructors in different workshops and meetings on EPI training
- ✓ Support the revision of EPI curricula in basic training institutions

Annex 5:

Satisfaction index based on results of the final evaluation by participants

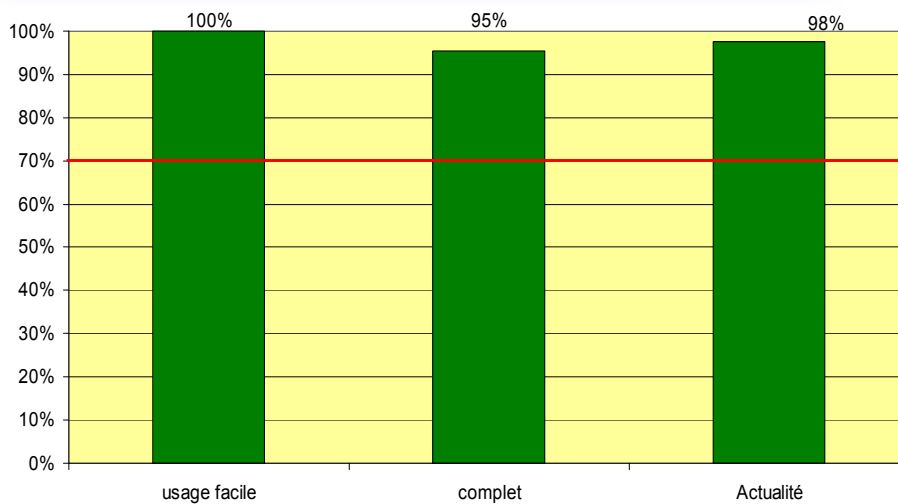
EVALUATION GENERALE

**Dr Mihigo R., Dr Ambendet, Dr Anya,
Jean M. Olinga Olinga, Alain Poy Nyembo**

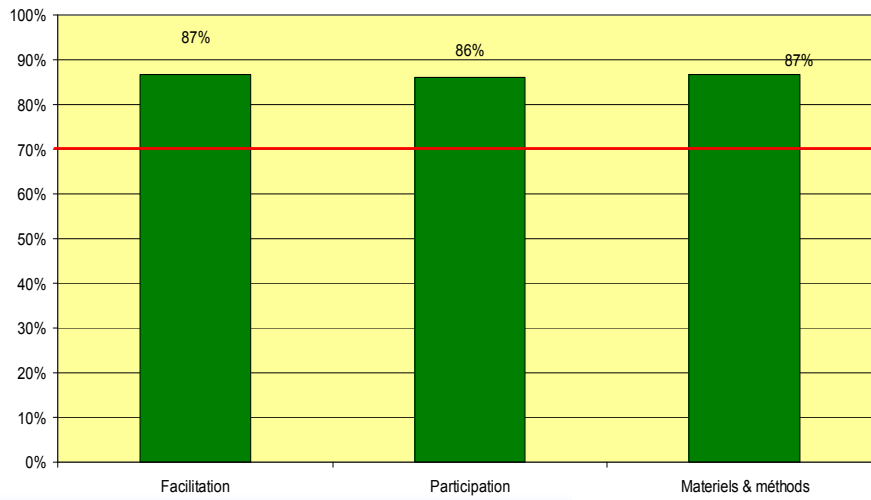


**World Health
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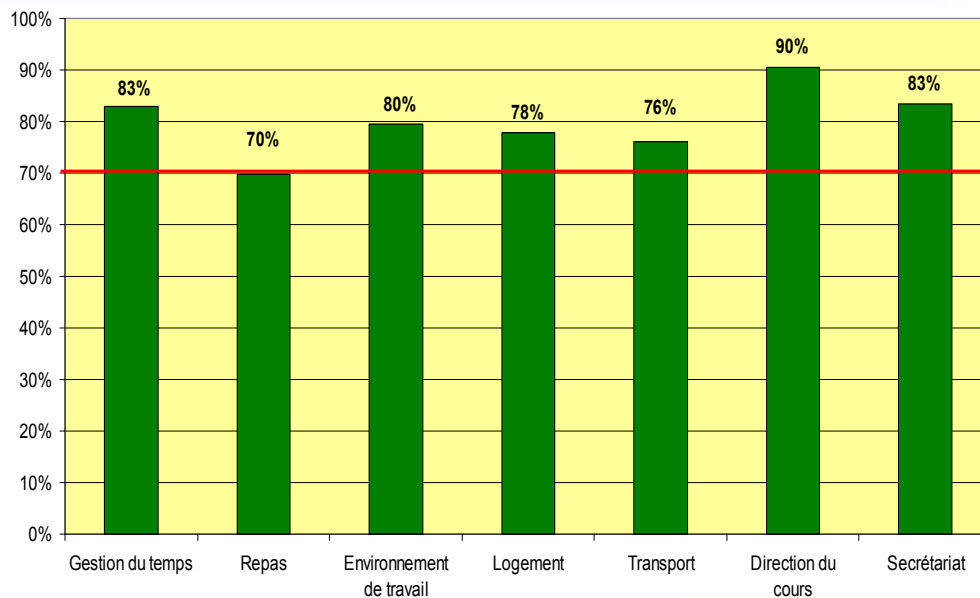


Facilitation/Participation/Matériels & Méthodes



Bureau Régional de l'OMS pour l'Afrique / WHO Regional Office for Africa

Aspects organisationnels



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