SUPPORT FOR INTEGRATED MANAGEMENT OF
CHILDHOOD ILLNESS TRAINING IN ZAMBIA:
FIELD TEST OF THE IMCI COMPLEMENTARY COURSE,
PUBLIC HEALTH PRACTITIONER TRAINING PLAN, AND
PRESERVICE NURSING EDUCATION IN IMCI

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ACRONYMS

BASICS  Basic Support for Institutionalizing Child Survival
CBOH   Central Board of Health
DANIDA Danish International Development Agency
ECSACON East, Central, South African Conference of Nurses
FAMS   Financial and Management Systems
GNC    General Nursing Council
HMIS   Health Management Information System
HRIT   Health Reforms Implementation Team
IMCI   Integrated Management of Childhood Illness
IMCI-CC IMCI Complementary Course
MOH    Ministry of Health
PHP    Public Health Practitioner
RN     Registered nurse
SIDA   Swedish International Development Agency
TOT    Training of Trainers
USAID United States Agency for International Development
ZCHP   Zambian Child Health Project
EXECUTIVE SUMMARY

BASICS/Zambia requested assistance from BASICS/Headquarters' Technical Officer Paula Nersesian to obtain up-to-date information about the public health practitioner (PHP) training plan, especially as it relates to training in IMCI; to develop a preliminary plan with the Zambian General Nursing Council (GNC) for including IMCI training into their nursing pre-service curriculum; and to provide input to the BASICS/Zambia 1998 work plan for the Zambian Child Health Project (ZCHP) in relation to the IMCI and PHP training plans following her participation in the IMCI complementary course field test as a content observer.

Ms. Nersesian participated in meetings related to the PHP, met with the General Nursing Council of Zambia, made a site visit to Chainama Hills College of Medical Sciences and participated in discussions with BASICS/Zambia staff regarding the work plan, in addition to serving as a content observer in the IMCI complementary course for one week.

The IMCI complementary course (IMCI-CC) appears to be effective in relaying the core content of IMCI to participants. The alternative teaching methodologies were used effectively by the course facilitators, and participants were fully engaged in the learning process. After observing the IMCI-CC for one week, it appears appropriate for use in Zambia for training selected groups of health workers.

The Central Board of Health is creating a new cadre of front line health provider, the public health practitioners, who will be trained to deliver an essential health package. IMCI is being used as the approach for managing the sick children. It is the only module of the PHP that is fully developed and field tested. The IMCI training plan is currently being adjusted in order to ensure that it complements the PHP training plan. BASICS will immediately support the IMCI portion of the PHP training by increasing the number of IMCI facilitators at the training institutions targeted for early PHP training in the Southeast region. BASICS will also support these training institutions by providing training materials, supplies and equipment needed for IMCI and PHP training. In addition, BASICS can support the PHP process by:

1) Assisting with site audit visits at training institutions;
2) Facilitating development and field testing of the remaining modules;
3) Incorporating modifications into the modules after field testing; and
4) Developing assessment tools for selected modules.
Integrating IMCI into nursing pre-service education is a priority for the General Nursing Council of Zambia. BASICS can support the curricula review and update process through the following mechanisms:

1) Provide IMCI materials and training as soon as possible for GNC representatives and pediatric nursing tutors from selected training institutions to prepare them for a curricula review and update workshop;

2) Support selected training institutions to build capacity for pre-service training in IMCI by training their tutors as IMCI facilitators and providing materials, supplies and equipment needed for IMCI training; and

3) Support and participate in the curricula review and update workshop.

PURPOSE OF THE VISIT

1) Participate in the field test of the IMCI complementary course as a content observer to ensure that the essential technical content of IMCI is taught accurately to the participants using adult education theory and participatory teaching methods.

2) Obtain up-to-date information about PHP training plan, especially as it relates to training in IMCI.

3) Develop a preliminary plan with the Zambian General Nursing Council for including IMCI training into their nursing pre-service curriculum, particularly in light of the current focus on supporting training institutions for the PHP training.

4) Provide input to the BASICS/Zambia 1998 work plan for the Zambian Child Health Project in relation to the IMCI and PHP training plans.

BACKGROUND

IMCI Complementary Course

In 1995 during the early preparations for the introduction of IMCI in Zambia, concern was raised that health workers managing sick children who have only nine years of primary and secondary schooling may find it difficult to master the IMCI course due to the extensive reading which it requires. In response to this concern, USAID/BASICS is supporting development of a complementary version of the IMCI course currently called the IMCI complementary course (IMCI-CC). It is intended to have worldwide applicability. However, the prototype course was developed using the Zambian-adapted IMCI materials in order to be field tested in Zambia. The
course uses adult education theory and participatory teaching methods to reduce the amount of reading required. The clinical practice sessions, however, remain unchanged. The authors of the IMCI-CC from World Education, Inc., BASICS technical officers, and a consultant representing WHO’s Division of Child Health and Development are observing and evaluating the field test of this course in Lusaka, Zambia, from September 8 to October 3, 1997.

Public Health Practitioner Training Plan

In 1995 the health reforms implementation team (HRIT) within the Ministry of Health (MOH) decided to create a new cadre of polyvalent health worker, the public health practitioner. They felt this would be the most cost-effective way to deliver the essential package of health care which includes interventions in six main areas: maternal health and family planning; child health; HIV/AIDS and sexually transmitted diseases; tuberculosis; malaria; and water and sanitation. The PHP will be trained to deliver the essential package of health care services at first level health facilities. Although the HRIT envisioned the PHP training to start in pre-service education programs, they later decided to first take an in-service modular approach, then later upgrade pre-service curricula.

Currently, discussions are focused on how to operationalize the PHP concept. There is a sense of urgency overlaid on these discussions since a statutory instrument delinking health center staff from public service was recently published. However, this statute is currently under injunction causing uncertainty regarding its legality. In addition, a decision was made that District Health Boards could only appoint health workers to PHP positions at health centers, requiring them to have upgrade training since PHPs do not actually exist in Zambia at this time.

To move the PHP development process, a training working group, chaired by the CBOH director of systems development, was established to develop an implementation plan for upgrading the skills of front line health workers so they could be eligible for PHP positions. Membership of the training working group includes experts from the CBOH, MOH, GNC, Medical Council, representatives from health professional training institutions, international partners, and others. The group’s responsibilities are to develop an integrated in-service training curricula in the essential package of health care, training materials, and training plan for upgrading the skills of health workers from health centers and health posts (i.e., clinical officers, nurses, and environmental health technologists), and to determine what resources are needed to accomplish these tasks. Within the training working group, a subgroup was nominated as the training reference group to guide and oversee the work.

In June 1997, the training reference group released a draft plan for the training of PHPs. However, the CBOH has not finalized the proposed plan. Some constraints to implementation of the plan include: funding (which is estimated at US$22.6M for training the estimated eligible 7,000 health workers); delay in identification of appropriate training institutions; inadequate numbers of trainers; training modules not completed, field tested, and produced; and lack of agreement on the proposed training plan by stakeholders. The plan was discussed at a training...
working group meeting on September 25, 1998. The main outcomes of the meeting were that a
PHP steering committee was proposed (although a date for their first meeting was not set) and a
focus region for starting IMCI implementation was identified (Southeast region).

Pre-service Education in IMCI

Although the CBOH has chosen to focus first on in-service training for preparing PHPs, they
recognize that pre-service education is a cost-effective strategy to prepare health workers to
implement the essential health care package successfully. Since IMCI is one of the essential
modules in the PHP curriculum, it is therefore slated for eventual inclusion in pre-service
education.

Even before the training reference group presented their PHP implementation plan, the General
Nursing Council included review and update of their curricula in their new strategic plan.
Initially they planned to update components on child health and reproductive health, but now
they acknowledge the need to incorporate the entire PHP curriculum into nursing pre-service
training. Unfortunately, focus on updating the pre-service curriculum has been stalled due the
GNC’s active participation in the training reference group’s work on the PHP implementation
plan. However, they are planning to hold a workshop in 1998 to review and update their
curricula.

Representatives at Chainama Hills Medical College have also indicated that there is interest
among the current clinical officer trainees to incorporate the PHP curriculum into their pre­
service training. BASICS will follow up with representatives of the Zambian Medical Council to
determine if they are also interested in hosting a curriculum review and update workshop.

TRIP ACTIVITIES

IMCI Complementary Course Field Test

During the first week of the IMCI complementary course, the author participated in the field test
as a content observer to ensure that the facilitators teach the essential technical content of IMCI.
This role included observing the didactic and clinical practice portions of the training as well as
participating in the facilitators’ and observers’ meetings which immediately followed the training
each day.

Public Health Practitioner Training Plan

Meetings were attended that related directly and indirectly to the PHP training plan including: an
interagency meeting held in Ndola on September 18 to provide suggestions to the CBOH
Directorate on the PHP training plan; the Zambian Situational Analysis Study 1997 and the
Zambian Demographic and Health Survey National Seminar sponsored by the Central Statistical
Office in Lusaka on September 23 and 24, respectively; and a training working group/PHP training reference group meeting in Lusaka on September 25. Individual meetings were held with key stakeholders in the PHP at the CBOH and GNC, and a site visit was made to Chainama Hills Medical College.

All available documents relating to the PHP training plan were reviewed to help determine how BASICS could best support the PHP training process. Discussions were also held with BASICS staff to adjust plans for current IMCI activities in order to complement the PHP training plan.

Pre-service Education in IMCI

Discussions were held with the ONC to discuss their plans and intentions for a nursing curricula review and update workshop, which is the initial step in updating the curriculum to include the essential health package including IMCI. BASICS donated a set of IMCI materials to the GNC library and a plan for training key nurse tutors in IMCI was developed with GNC staff.

ZCHP Work Plan

Input on how BASICS can support the PHP training plan and introduce IMCI into nursing pre-service curricula was given to and discussed with the key work plan authors.

RESULTS AND CONCLUSIONS

IMCI Complementary Course Field Test

The IMCI-CC appears to be effective in relaying the core content of IMCI to participants. The alternative teaching methodologies were used effectively by the course facilitators, and participants were fully engaged in the learning process.

After observing the IMCI-CC for one week, it appears appropriate for use in Zambia for training selected groups of health workers (see Appendix A for criteria used in participant selection for the field test of this course). Although the participants were able to read the handouts and flipcharts used in the IMCI-CC it was evident even in the first week of the course that, due to the extensive reading required, they would not have been able to master the course material if the standard course was used. However, the standard course currently in use in Zambia remains appropriate for selected groups of participants (i.e., those with strong reading skills and more recent exposure to formal classroom instruction). The criteria for selecting participants for either course will have to be further developed to match reading skills and learning styles in the best way.

Perhaps the most striking observation was that the course accomplished the very important goal of relating what participants already know and do to the material and methods of IMCI. It was
clear that the participants had tremendous experience managing sick children in their health centers and the IMCI-CC allowed them to use that experience as they learned IMCI. Participants may be more likely use IMCI in their facilities if they have a chance to see how it relates to what they are doing now (i.e., to see that it is not an entirely new process). This training approach alone will not suffice in enabling the participants to use IMCI at the facility, however. Supportive supervision, alterations to clinic flow and availability of medications must also be addressed.

Appendixes B, C, and D contain specific comments from observations of the classroom sessions, clinical practice sessions, and general observations.

Public Health Practitioner Training Plan

Although the details of PHP training have not been finalized, BASICS will support this scheme by continuing to train facilitators and health workers in IMCI, facilitating completion of the training modules and assessment tools, and assessing the capacity of training institutions.

IMCI Facilitator Training

BASICS staff responsible for IMCI training are remaining up-to-date on the PHP plans and will ensure that IMCI training sponsored by BASICS will complement the PHP training plan. Specifically, BASICS will increase the number of IMCI facilitators at the training institutions targeted for early PHP training in the Southeast region (Chainama Hills Medical College, University Teaching Hospital School of Nursing, and Chipata School of Nursing). BASICS will also support these training institutions by providing training materials, supplies and equipment needed for IMCI and PHP training.

Chainama Hills Medical College indicated that they would like to train tutors in IMCI and could sponsor an IMCI facilitator training course between November 10 and January 31. However, they will need assistance from BASICS for transportation, materials and other logistical matters since they have not yet hosted an IMCI training. BASICS staff are familiar with the layout at Chainama and a few of their tutors have already been trained as facilitators. We expect that those trained in IMCI will be used as master trainers in the PHP training-of-trainers course scheduled to begin in February 1998. Nurse tutors from training institutions targeted for early PHP training should also be identified and included in this course since it is unlikely that Chainama will be able to release enough faculty members to fill the three-week course (two weeks of standard IMCI training plus one week of facilitator training).

BASICS staff have also indicated that currently scheduled IMCI courses can be used to train additional facilitators from key training institutions in the Southeast region. The GNC will help identify pediatric nurse tutors to participate in these courses since these tutors will likely be responsible for teaching the sick child module of the PHP curriculum.
In anticipation of more decisions being made regarding the PHP training plan, BASICS will conduct up to four additional IMCI facilitator training courses. This should establish a core group of master trainers for IMCI in the Southeast region and augment the group of trainers based in Kitwe. Then as PHP training rolls out to the remaining three regions it is expected that these facilitators will then be available to train facilitators in the other regions. Currently, only a handful of nurse tutors have been trained in IMCI anywhere in Zambia.

However, until funding for the PHP plan is secured and the PHP steering committee is officially formed and meeting regularly, we can expect uncertainty regarding the PHP training plan. In that light, it is prudent for BASICS to support the activities as described above since they are in agreement with the current PHP plan, which appears to be generally accepted by stakeholders. In addition, these activities will also continue to support the ongoing IMCI training plan established by the IMCI advisory group.

**Materials Development**

Training modules and associated materials (training-of-trainers guides and assessment tools) for each of the eight components of the PHP in-service training are not yet finalized. At the PHP meeting held at the CBOH on September 25, the training resource group suggested that PHP content working groups be formed to take responsibility for the following activities:

1. Developing the training modules and assessment tools using a standard format (which has yet to be designed).

2. Field testing and revising the training modules.

3. Developing the facilitators training program.

4. Supporting the implementation of the facilitators training and the PHP training in close collaboration with the training institutions and districts.

Each module is two weeks long with the exception of Modules 8 and 9, which are one week each. BASICS is providing technical assistance for the development and field testing of Modules 5, 6, and 7. BASICS can expand that support to additional modules if the need exists. The modules that have not yet been finalized need immediate attention if the time line for implementation of the PHP training is to remain unchanged (training of trainers to begin in February 1998). After the modules are completed, they need to be field tested, revised and produced. In addition, the training of trainers course needs to be developed. The status of each of the modules follows.
Module 1: Key Approaches

Content areas: Working with communities;
Health education/IEC;
Interpersonal communication and counseling; and
Gender/vulnerable groups.

Status: Not yet drafted. Various components of this module have been prepared for other training programs, but they have not yet been compiled into one two-week course. The persons responsible for developing this module have been notified although they have not officially met.

Module 2: Management Tools/Skills

Content areas: Quality assurance;
Coaching/training;
Teamwork;
Planning/health center/post management;
Drug management; and
Health management information system.

Status: Not yet drafted. Although the group responsible for this module has been identified, the members have not yet been officially informed of their responsibilities.

The health management information system (HMIS) team at the CBOH has developed an extensive two-week course on the new HMIS for Zambia. They feel it will be difficult to provide much usable information on the HMIS in only two days. A suggestion was made to make the HMIS/FAMS training compulsory for all PHPs at the most recent PHP training resource group meeting held in September 1998.

The HMIS training has a an additional two and a half day course on financial and management systems (FAMS) that focuses on drug supply management. In addition, the drug management course developed by WHO and field tested in South Africa last year was given to the CBOH as additional resources for development of this portion of the module.

BASICS and the HMIS have both worked on approaches to supervision at the health facility and a workshop on supervision will be held in October. The outcomes of this meeting will likely help form the content of the section on supervision.
The quality assurance section of the CBOH has been conducting training with established training materials that take approximately 18 days to cover. Mrs. Joyce Tembo stated that she will be able to condense that information for this module.

Module 3: Maternal Health and Family Planning

Status: Two reproductive health modules prepared by the JSI/Zambian Family Planning Services Project and DANIDA are being reviewed with the intent of collapsing them into a single source on reproductive health. This module will be field tested from November 10-21 at which time the module will be adapted for problem-based learning.

Module 4: STDs/HIV/AIDS/TB

Status: Not yet drafted, but a consultant is currently in Zambia assisting with its preparation.

Module 5: Integrated Prevention (Well Child)

Status: The nutrition component is available in rough draft format only. Considerable work is still needed to complete this section of the module. BASICS consultant Adwoa Steele is currently in Zambia assisting the National Food and Nutrition Commission with finalizing this component.

With the assistance of a BASICS consultant, the immunization component is under development and a draft of this section will be ready by the end of October.

Module 6: The Sick Child (IMCI)

Status: The IMCI training course will be used for this module. An assessment tool has not been developed for this course. A five-day facilitator’s training workshop (training of trainers) has been used in Zambia. The facilitator-candidate first participates in the basic 11 day (two week) IMCI course, then they practice facilitation skills in an IMCI skills development workshop. This follow-on training for IMCI facilitators could easily be shortened depending on how many of the IMCI facilitation skills are covered in the PHP training of trainers course. Another important consideration regarding this course is that a facilitator-to-participant ratio of not less than 1:4 should be maintained. This means that a maximum of 24 participants can be trained in a two-week period with six facilitators.
Module 7: Water and Sanitation

Status: This module has been drafted. The malaria section is currently being revised by Michael McDonald with his Zambian counterparts at the Tropical Disease Research Center in Ndola. The entire module will be field tested from October 20 - November 15. An assessment tool has not yet been prepared.

Module 8: Other Diseases and Illnesses

Status: This module has not been drafted, although a content group has been formed.

Module 9: Essential Drugs

Status: This module is being folded into the compulsory module on management tools and skills.

Support to Training Institutions

There is a need to verify the self-reported information provided by the training institutions regarding their capability to start PHP training and determine what their critical needs are. Mary Kaoma of BASICS/ZCHP and Mariam Lyby, capacity-building advisor at the CBOH from DANIDA plan to make field visits to the nursing schools and conduct site audits. A date for these visits has not yet been set. A key element to examine during the site visits will be the availability of clinical practice sites for training such as IMCI which require both inpatient and outpatient facilities with adequate numbers of cases of sick children.

Staffing for the PHP in-service training is a key issue because it will place a significant burden on the training institution’s ability to continue their pre-service training programs unless additional staff are hired. Funding for these staff has not been obligated. Until funding is secured, it is unlikely that advertisements for these positions will be posted, leading inevitably to a delay in implementation of the PHP training and potentially negatively impacting nursing pre-service training.

Additional equipment, materials and supplies will also be needed in order to meet the demand for these resources by the in-service and pre-service trainees.

SIDA has indicated that they may provide support for postings to the PHP secretariat at Chainama but not to training institutions for new PHP trainer posts. They are also able to support the TOT and PHP in-service training. This assistance would have to be requested from the training institutions in the form of a sum based on how much money it would take to train a PHP designate. This could be a fully loaded costing including the salary of the trainer.
Pre-service Education in IMCI

Nursing Training

The General Nursing Council reported that they routinely update the nursing curricula and that a review and update was due. The last one took place in 1990 in order to incorporate additional material on safe motherhood and family planning. The process they used follows:

1) An orientation workshop was held for selected training institutions.
2) Nurse tutors then taught the new material in the way they felt was appropriate.
3) The tutors and GNC then reassembled to share their experiences and decide collectively how best to incorporate the material.
4) The curriculum was then rewritten including the new material.

The GNC has made curriculum review and update a priority for several reasons:

1) They want to incorporate the PHP curriculum, including IMCI and additional material on reproductive health, into basic nursing training.
2) The regional nursing body for Africa called the East, Central, South African Conference of Nurses (ECSACON) is currently in the process of identifying core nursing competencies with the aim of standardizing nursing practice regionally.
3) Some nursing schools are petitioning to establish diploma programs for registered nurse (RN) training. Currently the RNs are certified, but a diploma program will have the university undersign their training, a step towards further professionalizing nursing in Zambia.

Other reasons why it is important to undergo the curriculum review and update process are that the community health focus is not strong and reinforcement of material learned in class through community practice is limited. Incorporation of the PHP curriculum into the basic training would partially address this issue.

Clinical Officer Training

The head of the clinical department at Chainama Hills Medical College reported that clinical officer candidates are requesting PHP training in their pre-service education. Since the Medical Council is responsible for the clinical officer curriculum, they need to be contacted regarding this issue. However, there was clearly interest on the part of Chainama staff for participating in a curriculum review workshop with the Medical Council.
The head of the Clinical Department also expressed interest in IMCI. He reviewed the “Assess and Classify” module and felt it was very appropriate for preparing clinical officers for managing sick children. When he requested 100 sets of the IMCI materials, he was informed that more trained facilitators would be required. Currently only four faculty at Chainama are trained in IMCI.

Additional Comments on Pre-service IMCI Training

In the trip report prepared by Dr. Bob Pond on preparations for IMCI in Zambia, several questions were posed regarding introducing IMCI training into pre-service education. Following are some responses to those questions.

1) Which cadres should receive pre-service training in IMCI?

All classes of health professional should eventually receive training in IMCI. However, the cadres to target initially are registered nurses, enrolled nurses, clinical officers, and environmental health technologists since they are slated for PHP training, which includes IMCI. IMCI training for physicians will likely follow later.

2) What needs to be done to introduce IMCI into the curricula for these cadres?

The professional governing bodies (i.e. the General Nursing Council and the Medical Council) must first demonstrate commitment to pre-service training in IMCI. The curricula which they control will need to be reviewed and they will then have to determine if IMCI content can replace portions of their training or be added to the curricula as a separate training activity.

3) Have the training officials at various training institutions been introduced to the course?

Representatives at a few institutions have been trained in IMCI: University Teaching Hospital School of Nursing, Lusaka; Kitwe School of Nursing, Chainama Hills College of Medical Sciences, Lusaka.

4) Are these representatives supportive of IMCI?

Although the positions of some representatives are known to be positive, other representatives’ positions are not known.
5) Have officials of the General Nursing Council and the Medical Council been introduced to the course?

No representative of the General Nursing Council has been trained in IMCI although they have been oriented to the material. The Medical Council’s level of understanding of IMCI is not known.

6) Are these representatives supportive?

The General Nursing Council is supportive of the IMCI process. The Medical Council’s position is not known.

7) WHO/CHD recommends that “Until guidelines on inpatient care are developed, pre-service training of physicians in medical schools [in IMCI] will not be possible.” WHO/CHD has begun work on the guidelines for inpatient care, but they are not yet ready. Should pre-service training of Zambian physicians on IMCI wait until the WHO guidelines are completed?

For physician training in IMCI, it may be logical to wait until the inpatient guidelines are ready. However, for nursing pre-service training in IMCI, the only barrier to initiating a curriculum revision to include IMCI is the upcoming PHP training, which will rely heavily on nursing training institutions. The capacity building that will result from the PHP training approach will only support pre-service training and as soon as the GNC is able to complete the curriculum revision process, training institutions should be in the position to provide IMCI training, with or without the availability of inpatient guidelines.

8) Which training institutions should provide pre-service IMCI training?

The four training registered nurse training institutions and Chainama Hills College of Medical Science should be targeted initially due to the prominent role they will play in the PHP training plan, which includes IMCI in the module on sick child care.

Nursing institutions preparing enrolled nurses will need to be evaluated for their capacity to support IMCI training. By the time they are ready to support IMCI training, the IMCI complementary course may be available for these institutions.

9) What training of trainers and what equipment would be needed for these various institutions to provide in-service training in IMCI?

At a minimum, a television monitor and VCR would be required. These details will be explored during the training institutions site audit visits.
10) Do each of the training institutions have appropriate sites to provide clinical practice IMCI skills?

The four registered nursing schools and Chainama College have adequate clinical cases. The enrolled nurse schools need to be further evaluated in this regard. However, BASICS has successfully supported IMCI training at the district level in Luanshya using Thompson Hospital as a clinical training site where an adequate number of clinical cases were identified, according to the course director.

ZCHP Work Plan

ZCHP staff responsible for IMCI implementation have considered the PHP training work plan in the development of their IMCI training plan. No conflicts in scheduling or follow-up activities were encountered since the region selected for the launch of the PHP (Southeast) is also one of ZCHP’s focus areas. The nursing pre-service activity is a follow-on activity which the staff are ready and willing to undertake.

RECOMMENDATIONS

IMCI Complementary Course

The IMCI complementary course appears appropriate for use in Zambia and should be considered as an alternative to the standard IMCI course currently in use. However, since this perspective is based on observations of participant performance in just the first week of a three week course, it is critical that input from the other observers be considered as well.

Clearly, modifications will have to made to some of the lesson plans and supporting materials, such as the facilitator’s guide and participant handouts. But, the course appears to be effective in providing participants with the requisite set of skills needed to manage sick children using the IMCI process.

After revisions are made to the field test version of the course, the Zambian IMCI advisory group should consider whether to:

1) Adopt the IMCI-CC as the sole course used nationwide.

2) Retain the option of using both the IMCI-CC and the standard course depending on the background of the participant.

3) Use only the standard course for nationwide use.
4) Use the IMCI-CC for training first line health workers, and use the standard course to train physicians, tutors, and IMCI facilitators (facilitators will still require training in adult education theory and participatory training methods).

My impression is that the IMCI-CC is well-suited for use in the PHP in-service training program and could be considered as the training package to use for first line health workers. Since it will take some time for the materials to be revised, the standard IMCI package can be used to train facilitators in the technical content of the course. Then, if the IMCI-CC is selected for use in the PHP, the facilitators can be trained to use the participatory methodologies that form the course.

Public Health Practitioner Training Plan

In order to cohesively link the IMCI training plan with the PHP training plan, the following recommendations are given.

*Increase training institutions' capacity to deliver the PHP training package, including IMCI.*

1) Conduct site audit visits at key training institutions to assess their readiness for IMCI and PHP training.

2) Increase the number of IMCI facilitators at key training institutions.
   a) Conduct an IMCI facilitator’s training course at Chainama by the end of 1997.
   b) Conduct an IMCI facilitator’s course at UTH School of Nursing with representatives from regional training institutions before February.

   This timing will allow tutors from the schools to have exposure to IMCI prior to the GNC-sponsored curriculum review and update workshop and will also increase the number of IMCI trainers at the training institutions where PHP training will be conducted.

   c) Conduct an IMCI facilitator training course in Chipata by April 1998.
   d) Conduct an IMCI facilitator training course in Kitwe by July 1998.

3) Provide training materials, equipment and supplies to key training institutions. Key institutions are likely to include: Chainama Hills College of Health Sciences, UTH School of Nursing, Chipata School of Nursing and Kitwe School of Nursing. Materials to provide might include TVS, VCRs, photocopier, desks and chairs, flipcharts, markers, pens, clipboards, and IMCI materials.
Pre-service Education in IMCI

In order to integrate IMCI into health professional pre-service education curricula, the following general steps are required.

1) Train tutors from the various professions and representatives from their corresponding professional bodies in IMCI.

2) Professional bodies sponsor curriculum review and update event.

3) Technical support and follow-up on IMCI provided to the training institutions to ensure the technical content is relayed accurately.

FOLLOW-UP ACTIONS REQUIRED

IMCI Complementary Course

BASICS/Washington and BASICS/Zambia to provide their position to the IMCI advisory group regarding use of the IMCI-CC in Zambia, at a minimum considering its usefulness in the PHP in-service training course.

PHP Training

1) PHP plans to be finalized by CBOH.

2) BASICS to ensure that the IMCI plan remains aligned with the PHP plan.

3) BASICS staff participate in the content working groups for module completion, field testing, revision and preparation of TOT and assessment tool materials.

4) BASICS staff support IMCI facilitator training courses for PHP trainers.

5) BASICS staff participate in site audits at training institutions with capacity-building advisor from CBOH.

Pre-service IMCI Training

1) General Nursing Council of Zambia to submit a request to BASICS for participation in IMCI training courses for key GNC staff and pediatric nurse tutors from key training institutions (i.e., those that are most ready to begin PHP training).

2) BASICS to provide ongoing support to the GNC for incorporating IMCI into their curricula. Support should include assistance with planning, participating and following up the nursing curriculum review and update workshop which GNC proposes to hold next year.
3) BASICS to monitor training institutions' experiences with IMCI in pre-service training.
APPENDIX A
Criteria Used for Participant Selection in the IMCI Complementary Course Field Test
Appendix A

Criteria used for participant selection in the IMCI Complementary Course field test

1. **Level of academic education**
   Participants had to be form 3 (grade 9) or below.

2. **Professional background**
   Participants had to be Enrolled Nurses or Environmental Health Technologists with minimal or no in-service training.

3. **Daily activities of the employee**
   Participants had to be the ones involved in assessing and treating sick children.
APPENDIX B
Observations from Classroom Sessions of the IMCI Complementary Course
Appendix B

Observations from Classroom Sessions of the IMCI Complementary Course

> Add a facilitator’s note listing the reasons why children under 5 years old are not covered by IMCI. Reasons include: they have the ability to better describe what is wrong with them, they are treated differently than young children, the cut-off points for them — such as breaths per minute — are different.

> Use of checking questions, which help facilitators determine whether participants understand material, needs improvement in this course. Use of this in-process evaluation technique is perhaps unfamiliar to facilitators. Increased attention to this method in the facilitator’s training course is advised.

> General Danger Signs: Participants had difficulty mastering the concept of general danger signs and how they are used to classify conditions throughout the chart.

The entire video segment on general danger signs should be incorporated into the complementary course curriculum.

When a general danger sign that has “or” contained in it is identified (unable to drink or breastfeed and lethargic or unconscious) the entire sign should be circled. This may help participants better understand this concept.

Not able to drink or breastfeed should be reinforced. The participants did not seem to grasp the concept of not being able suck or swallow as the critical message. They understood the concept for exclusively breastfed children as: if the child cannot breastfeed, then the sign is present, without making sure that the child can take fluids in another way.

Some participants thought that chest indrawing was a general danger sign even on the fourth day of clinical practice.

> The exercises for cut-off points for fast breathing did not adequately reinforce this material and I was not convinced that by the end of the session they understood the material clearly. This is partly due to the fact that the facilitators in my group revised one of the activities in a confusing way. An additional drill should be added to reinforce this material.

> The significance of cough lasting more than 30 days (TB or other chronic lung problem) should be mentioned in the session on assessing cough or difficult breathing when “For how long?” is presented.
Participants were confused with the issue of identifying stridor or wheeze. Some mistakenly thought that if stridor was not present then wheeze was present. More reinforcement of this in the classroom is needed.

Although sessions on counseling skills and communications were designed to come early in the complementary course, they received less time than allotted due to time constraints. Facilitators relegated this material to lower priority when they had to choose between covering material on assess and classify or communications. The material was eventually covered, although in abbreviated form.

A glossary of terms should be provided. Or participants can construct a glossary on the wall as they go by indicating what words they are unfamiliar with. Facilitators can then perhaps post pre-printed words with definitions.

The length of time allotted for presenting assess and classify diarrhea needs to be increased. There was inadequate time to cover this section adequately and the schedule had to be adjusted.

There were problems with the handout on “How diarrhea kills” since the term and definition of diarrhea was included. The information contained in the facilitator’s note is clear, however, and adapting that material to the handout should be considered.

The standard IMCI language should be used consistently by facilitators.

The importance of hand washing should be discussed and reinforced in the classroom.

In general, the videos seemed to reinforce the material presented in the classroom setting very well and should be used as much as possible.

Growth faltering was not covered in the course material. Material on this condition needs to be added to a session, or a session should be developed.

Facilitators should be encouraged to use positive feedback as opposed to negative feedback.

Facilitators should try to avoid using the non-participatory teaching method of stating information and then requesting the participants repeat the words which were just stated.

Facilitators need to be reminded that if they elicit a response for a definition and the correct definition is not provided then they need to clarify the point and provide the definition before moving on, otherwise the participants will be confused.
APPENDIX C
Observations from the Clinical Practice Sessions of the IMCI Complementary Course
Appendix C

Observations from the Clinical Practice Sessions of the IMCI Complementary Course

- Well-facilitated clinical instruction in both the inpatient and outpatient clinical sessions is imperative for participants to master the material presented in the classroom sessions. In future courses (either the standard course or the complementary course) experienced inpatient clinical instructors should be used. To offset the inevitable lack of adequate numbers of these instructors, inpatient instructor candidates should be identified immediately and trained by pairing them with experienced instructors during regular IMCI training.

- Participants had difficulty identifying chest indrawing.

- Wall charts that have been hanging on the walls for approximately one year are in poor condition with torn edges and a water-logged, wrinkled appearance. In the future, wall charts should be laminated or a plasticized paper should be used to ensure that they last more than 2 years.

- Debriefing of the clinical sessions in the classroom immediately after the session is an effective way to provide reinforcement of skills learned while correcting incorrect performance or understanding. Debriefing in the vehicle immediately following the clinical session was not effective.

- The standard IMCI language should be used consistently during inpatient clinical practice and material not yet covered in the classroom session should not be covered prematurely in the inpatient setting, except to show an exceptional case that might not otherwise be available for observation later.

- Participants appear at ease in the clinical settings. They maintain good rapport with caretakers and appear comfortable assessing sick children.

- The importance of hand washing should be discussed and reinforced in the clinical settings. Although hand washing was encouraged at the end of each outpatient clinical session, it was not uniformly enforced in the inpatient session and I did not observe hand washing between children in either setting.

- Although participants were encouraged to use the recording form in a highly prescribed manner, I believe that participants should be permitted to use the job aid in innovative ways as long as they assess and document their observations correctly and arrive at the correct classification. Creativity should not be discouraged, but encouraged, especially in this type of course.

- If a special sign is identified in one of the participant’s cases, the inpatient facilitator should take the opportunity to show it to the other participants as well.
APPENDIX D
General Observations from the IMCI Complementary Course
Appendix D

General Observations from the IMCI Complementary Course

- The opening session, which was developed by the Zambian Course Director, was poignant, inspiring and motivating. Allowing the Course Director to prepare this session of the course is appropriate and encouraged. However, for those Course Directors that may require some direction, an outline should be provided. An outline of the content used in Ms. Moonze's opening remarks would be very appropriate:
  - Presenter defines integration with participant participation
  - Participants list country-specific causes of mortality and other illnesses
  - Discuss the illnesses identified
  - Describe the child who presents with multiple illnesses and tie that into the integrated and comprehensive approach of IMCI
  - Discuss the benefits of an integrated approach to caring for sick children

- The group of participants were appropriate. Group A had two participants with less than 10 years of experience: one had 2 years and the other had 6 years of experience. In spite of this aberration from the selection criteria, these participants were well-suited for the Complementary Course methodology.

- The facilitators' teaching skills using participatory methodologies improved during the first week. Feedback from the process observers seemed to help them in honing their skills. The skills which posed difficulties for the facilitators should be more thoroughly covered in the facilitator's training. These skills include, for example, how to write effectively and concisely on flipchart paper, listening carefully to what participants say and relating that to material which comes a bit later in the course. Finding the rhythm of co-facilitating takes time. Facilitators must be open to input from their partners.

- The participants participated actively and gave input whenever it was elicited. The use of their real-life examples kept them effectively engaged in the learning process.

- Specific feedback on various activities and sessions was provided directly and immediately to World Education, Inc. staff during the daily observers meetings.

- Formatting of materials:
  - Participant handouts should be further edited to reduce the number of words to the fewest number needed. Americanisms should also be removed. Suggestions will be provided directly to World Education, Inc.

  The facilitator guide requires extensive reformatting to make it user-friendly. Facilitators reported that they found the current lay-out difficult to follow.

- Additional and optional exercises should be offered for facilitators who want to check understanding further and for participants who want additional practice.
A new videotape should be edited so that facilitators can show segments sequentially without having to fast-forward and rewind the tape to find the correct segment.

Some participants had difficulty using the job aids due to vision problems.

One facilitator reported that although she found the facilitation skills difficult to master at first, she felt that these teaching methods are better for the participants because the reading required in the standard course is too much.