

IMCI

information

INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS (IMCI)

DEPARTMENT
OF CHILD AND
ADOLESCENT
HEALTH AND
DEVELOPMENT
(CAH)

HEALTH SYSTEMS
AND COMMUNITY
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IMCI training course for first-level health workers: Linking integrated care and prevention

Introduction

One of the key elements of the Integrated Management of Childhood Illness (IMCI) strategy is an integrated case management training course for first-level health workers, developed by WHO and UNICEF. This 11-day course, which combines classroom work with hands-on clinical practice, teaches health workers effective management of sick children aged between one week and five years. The IMCI training course also emphasizes the prevention of disease and communication with caretakers. Health workers learn about routine updating of the immunizations of sick children, micro-nutrient supplementation, promotion of breastfeeding, and counselling to solve feeding problems.

Course objectives

When they have completed the training course, first-level health workers are expected to have the knowledge and skills to:

- Assess, classify and treat sick children accurately following the IMCI case management guidelines.
- Administer pre-referral treatment correctly and refer seriously ill children.
- Counsel caretakers about home care including how to give treatment, what signs to look for that indicate a child should be brought back immediately to the health facility, and when to return for follow-up care.
- Check children's immunization status routinely and give immunizations when needed.
- Carry out feeding assessments of children who are less than two years old or who are very low weight-for-age.
- When necessary, provide caretakers with appropriate nutrition and breastfeeding counselling.



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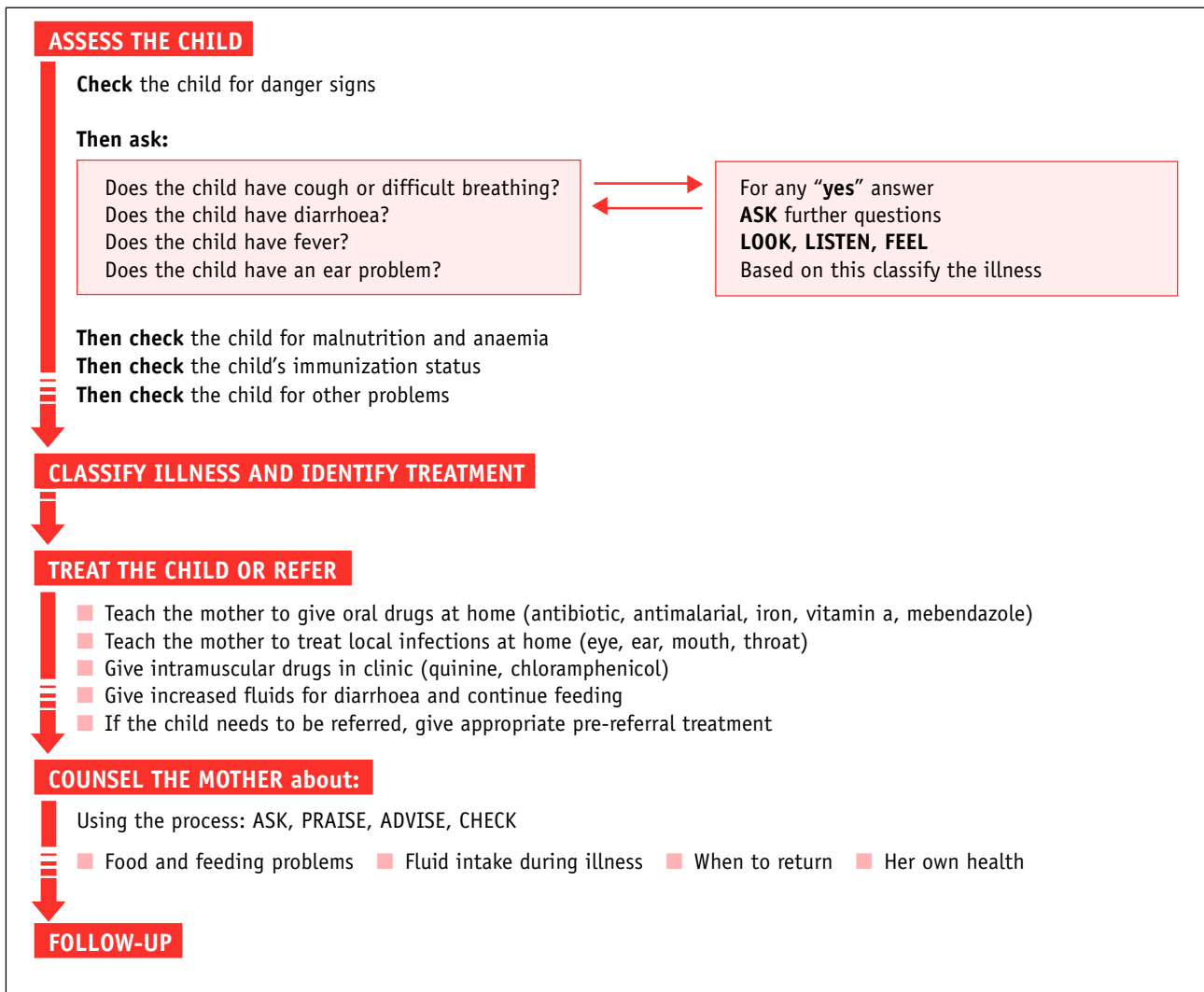
Target audience

The IMCI course was designed for the in-service training of literate health workers from first-level health facilities, including outpatient services of hospitals, health centres, health posts, dispensaries and clinics. Health workers from these facilities include doctors, medical assistants, nurses, health assistants and other paramedical health workers who treat sick children. In its current form, the IMCI course is not suitable for training community health workers, and addresses only outpatient management of sick children.

Course content

IMCI case management training brings together a well-defined set of knowledge and skills needed to accurately assess, classify, and treat ill children and, thereby, reduce mortality and avert significant disability (Figure 1). Case management relies on case detection using simple clinical signs and empirical treatment. As few clinical signs as possible are used; these signs

FIGURE 1



strike a careful balance between sensitivity and specificity. The complete IMCI case management process involves the following:

- The health worker *assesses* a child by checking first for danger signs, asking questions about common conditions (cough or difficult breathing, diarrhoea, fever, and ear problems), examining the child, and checking the nutrition and immunization status. The health worker also assesses the child for other health problems.
- The health worker *classifies* a child's illnesses using a colour-coded triage system. Many health workers are familiar with this system from experience with the WHO case management guidelines for diarrhoea and acute respiratory infections. Because children often have more than one condition, the health worker classifies each illness according to whether it requires urgent pre-referral treatment and referral, specific medical treatment and advice, or simple advice on home management.
- After classification, the health worker *identifies specific treatments* and develops an integrated treatment plan for each child. If a child requires urgent referral, the health worker gives essential treatment before the patient is transferred. If a child needs treatment at home, the health worker gives the first dose of drugs to the child.
- The health worker *provides practical treatment instructions*, including advising the caretaker on how to give oral drugs, how to feed and give fluids during illness, and how to treat local infections at home. The health worker asks the caretaker to return for follow-up on a certain date, and teaches them how to recognize signs that indicate that the child should return immediately to the health facility.
- If a child is underweight, the health worker *identifies treatment or refers the child*, when appropriate. The health worker also *provides counselling to solve feeding problems*, including assessment of breastfeeding practices. If a child should be immunized, the health worker *gives immunizations*.
- When a child is brought back to the clinic as requested, the health worker *gives follow-up care* and, if necessary, reassesses the child for new problems.

Course organization, materials and training methods

The course combines classroom work with hands-on clinical experience. Under the guidance of course facilitators and a skilled clinical instructor, participants work in small groups (6-8 participants with 2 facilitators in a group). Each participant attends 10 clinical sessions, seeing 30 to 50 sick children in an outpatient clinic or inpatient ward. Clinical sessions allow participants to practise assessment, classification, treatment and counselling skills using the IMCI case management guidelines. Several clinical sessions, and practice with hospitalized children presenting signs of severe disease, help participants to learn the accurate assessment of all clinical signs

covered by the course, including even the uncommon signs, which indicate a need for urgent referral.

The guidelines for facilitation of classroom work contain instructions on working with the set of seven training modules, including written exercises, individual feedback, group discussions, drills, presentations, demonstrations, short answer exercises, and role plays. Several exercises cover the identification of clinical signs using a booklet of photographs and a video, which demonstrates the assessment of sick children and presents several case studies. (See Figure 2 for a list of training materials.)

FIGURE 2

Training materials available for IMCI course for health workers at first-level health facilities

■ **A set of four wall charts that describe IMCI case management guidelines:**

Assess and classify the sick child age 2 months up to five years
Treat the child
Counsel the mother
Assess and classify the sick young infant
The charts are also in convenient booklet form for use by course participants

■ **A set of seven training modules:**

Introduction
Assess and classify the sick child age 2 months up to 5 years
Identify treatment
Treat the child
Counsel the mother
Management of the sick young infant
Follow-up

■ **A photo exercise booklet**

■ **Two videos:**

Assess and classify the sick child
Assess and classify the sick young infant

■ **For use during clinical practice in outpatient and inpatient clinical settings:**

Mother's counselling card
IMCI case record form

■ **Three facilitator guides:**

Facilitator guide for modules
Guide for outpatient clinical practice
Guide for the inpatient clinical instructor

The IMCI Adaptation Guide is provided for adapting these training materials to the country context

Based on experience in early use countries WHO recommends the following criteria for a standard IMCI inservice training course:

- Maximum 24 participants per training course
- Ratio of facilitators to participants of no less than one to four
- The completion of all training modules
- Duration of 80 hours
- Minimum of 30% of time in clinical practice
- Minimum of 20 sick children managed by each trainee.

Adaptation of the course content

The IMCI course requires adaptation in all countries. The process of adapting generic course materials to country-specific policies and guidelines involves extensive effort and usually takes about six months. Adaptation is, therefore, an important part of the overall planning process. An *IMCI Adaptation Guide*, available from WHO/CAH, provides a detailed description of the steps required.

Planning and adaptation of the IMCI course are also an important opportunity for various departments and levels of a health system to review their practices, to explore ways of working together, and to move towards a more coherent structure for the prevention and management of illness in children.

Course preparation: selection and training of course facilitators and participants

To ensure the quality of inservice IMCI training, WHO suggests that the **course facilitators** should preferably be medical personnel with extensive clinical and training experience that has involved clinical practice. Based on

early experiences in countries, the following approach to facilitator training involving three phases is proposed:

- Participation in the 11-day standard course for first-level health workers, which gives future facilitators knowledge of the course content and methods used;
- Participation in a five-day facilitator training course in the instructional techniques used in the course; and
- Immediate application of newly acquired skills by the facilitator-trainees during the course for health workers with a support of an experienced course director.

Special efforts must also be made to identify and prepare an effective **in-patient clinical instructor**. This person must have the competence and confidence to select cases appropriate for clinical practice from a ward of inpatients, assign these cases to participants, discuss their assessment and classifications, and ensure correct identification of as many clinical signs as possible. The clinical instructor should undergo the same training as other course facilitators and should already have significant clinical experience.

Participants in IMCI training courses should be selected from first-level facility staff with daily responsibility for managing sick children and who come from health facilities where drug supplies are acceptable and where follow-up is feasible and likely to occur.

Follow-up is an integral part of IMCI training

IMCI training includes both skills acquisition and skills reinforcement. The IMCI course is designed to help health workers acquire new skills to manage sick children more effectively. Health workers may find it difficult, however, to begin using these skills when they see children in their health facilities. They often need help to transfer what they have learned during the course to their own work situation.

For this reason, follow-up after training is included as the second essential component of the IMCI training process. A follow-up visit is designed to support the transfer, application, and reinforcement of new skills acquired during training. At least one follow-up visit should be conducted within one month of the training course, in order to assist health workers and health facilities with the transition to integrated case management. Using the structured procedure for follow-up visits, a trained supervisor helps health workers to overcome problems and make the most of their training.

Implementation of IMCI training

By May 1998, a total of 48 countries had initiated activities to introduce the IMCI strategy, with in-service training as an important component. Twelve out of the 48 have started training first-level health workers. Altogether during 1996-1997 more than 100 IMCI training courses have been conducted:

- Eleven inter-country courses to build capacity within the regions to assist countries implementing IMCI;
- Thirty-three national courses to develop national capacity for training, as well as for guiding planning, adaptation and other implementation activities; and
- Ninety-five district courses to train front-line health workers in first-level health facilities.

Lessons learned from IMCI training to date

The first two years' (1996-1997) experience of conducting inservice IMCI courses led to some early conclusions and raised a number of important issues related to training:

- The 11-day training course is an effective tool for teaching health workers from first-level health facilities how to manage sick children using the IMCI approach.
- In each country it is helpful to test the adapted course materials during one or two training courses before they are used on a larger scale.
- It often takes several courses before a facilitator becomes confident with the course content as skills increase with additional practice in facilitation.
- The course requires good clinical facilities with staff who are well-informed about IMCI procedure, busy outpatient clinical settings and good paediatric wards with a variety of patients.
- The course requires that participants have adequate reading abilities; even so, the existing training materials are not designed for self-instruction but require the presence of trained course facilitators.
- The follow-up of trainees is an essential part of training and is important in helping the course participants to start using newly acquired skills in their own health facilities; persons conducting follow-up visits should be trained in IMCI clinical skills and in course facilitation skills.
- Information from follow-up visits stimulates cross-sector collaboration, for example, to provide needed drugs and other supplies, to review policies on immunization and other services, and to improve referral pathways and care. ■

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