

Integrated Management of Child Health

IMCI

pre-service education

Teaching sessions



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Foreword

In the Name of God, the Compassionate, the Merciful

Medical schools play a key role in preparing the future cadres of health professionals who will be providing child health care services in the community, whether in the public or private sector. It is recognized that investment to enhance teaching in these institutions is as important as other key public health interventions, as well as being of support to those interventions. Effective teaching contributes to improving the quality of health care in a country; also, upgrading teaching represents a long-term response to the health care needs of a community.

Since its inception in the 1990s, when the Integrated Management of Child Health (IMCI) strategy was introduced in the Eastern Mediterranean Region, the WHO Regional Office for the Eastern Mediterranean recognized the need to introduce IMCI not only in the public health system but also in the teaching programmes of medical schools. Thus, it collaborated closely with the medical schools in the Region, and pioneered efforts in this area globally. Wide experience has since been gained in the Region. Based on that experience, the Regional Office has developed this IMCI pre-service education package to support countries and institutions in introducing IMCI in their teaching programmes, and in evaluating its use using standard approaches.

The advantage of this IMCI pre-service education approach is that it can be integrated with existing teaching programmes and does not necessitate the creation of new vertical structures. Further, it enhances the process of skills development that is key to improving the quality of care to children. I trust this package, with the instruments it offers, will be of great benefit to guide and support teaching institutions in their efforts to further enhance the quality of their teaching and, eventually, to produce qualified professionals ready to sustain the challenges ahead.



Hussein A. Gezairy MD FRCS
WHO Regional Director for the Eastern Mediterranean

Preface

This publication is part of the IMCI pre-service education package developed by the WHO Regional Office for the Eastern Mediterranean. The package was developed as a set of tools to assist teaching institutions in introducing, implementing and assessing undergraduate teaching programmes that include the IMCI approach.

Medical and allied health professional schools play a key role in preparing the future cadres of health providers who will be providing child health care services in a country, whether in the public or private sector. An increasing number of medical schools in the Eastern Mediterranean Region have been taking steps in recent years to introduce the Integrated Management of Child Health (IMCI) approach into their undergraduate teaching programmes. The Regional Office, through its child and adolescent health and development programme, has been closely collaborating with these institutions in the task, when IMCI was introduced in the Region as a public health approach, and as an initiative to address future IMCI sustainability. Development of this package was based on this collaborative experience and on a recommendation from the Member States. It proposes a standard approach to each phase, from planning to evaluation.

The package comprises the following publications.

1. *IMCI pre-service education: orientation and planning workshop: facilitator guide* is designed to assist in the conduct of in-depth participatory workshops for teaching institutions to develop plans to introduce IMCI into the teaching programmes. The guide, tested in an intercountry workshop in July 2009, includes detailed guidelines, presentations and tools to support this task.
2. *IMCI pre-service education: teaching sessions*, with lesson plans to support planning and conduct of IMCI-related teaching sessions within the paediatric and community medicine teaching programmes, describes the student learning objectives, content and procedures of each session. The content was thoroughly reviewed by an expert group in 2008.
3. *IMCI pre-service education: guide to evaluation* is a comprehensive tool to assess whether IMCI pre-service education as a public health intervention improves students' competencies in managing main childhood health problems in outpatient settings. Extensively reviewed through expert consultations and tested in four medical schools, this guide comes with a user guide to data entry and analysis and a CD with the relevant e-forms and programme files.
4. *IMCI pre-service education: question bank* is a resource library of multiple-choice questions and case scenarios suitable for evaluations of IMCI pre-service education and student formative and summative assessments. It has already been used to develop student knowledge tests for evaluations in two medical schools, in 2009.
5. *IMCI pre-service education: e-lectures* on CD provides standard technical content as a resource to support IMCI-related teaching.
6. *IMCI pre-service education: e-learning material for students* on DVD is designed to support students' learning at their own pace through an electronic, interactive medium.

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Introduction

IMCI pre-service education: teaching sessions was written for faculty members of institutions which have introduced or planned to introduce the Integrated Management of Child Health (IMCI) approach into their teaching programmes. It provides a comprehensive outline to support planning and conducting of paediatric teaching sessions.

Lesson plans are an important aspect of effective teaching. This guide is intended not only to facilitate the conduct of sessions to impart knowledge to students but also to address the need to develop student skills through practice, a key objective of introducing IMCI into teaching. A balance must be reached in teaching between theory and practical experience. Therefore, three types of session are covered: theoretical—to enhance knowledge; practical—to demonstrate and practise skills without real patients; and clinical—to practise skills with real patients, under supervision.

The lesson plans have been prepared taking into account the realities of the teaching environment, where constraints exist with regards to the amount of time available for introducing new content and how to deliver it. They provide therefore a series of options for the teaching sessions, to suit different settings. Each option includes the session learning objectives, based on the key competencies that the session aims to address. The learning objectives guide the session content and methodology described in the outlines, together with the estimated duration of the session, the required teaching aids and procedures. A variety of methods are proposed, ranging from the traditional lecture with use of visual aids, to role plays, seminars, practical demonstrations and skill practice. The procedures for the session describe key points, not only on the conduct of the session but also on its preparation.

It is hoped that this guide will represent a valid and practical teaching aid for those institutions which plan or have already opted to introduce IMCI into their teaching programmes.

Part 1. Paediatric teaching sessions

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Teaching methodology

Learning objectives of IMCI should be developed for every teaching institution/programme. They are the basis for decisions on teaching content, methodology, schedule and students' assessment. Every IMCI teaching session should have a lesson plan.

Three types of sessions are proposed:

- A. Theoretical sessions
- B. Practical sessions
- C. Clinical sessions

Knowledge acquired through IMCI teaching can be imparted through theoretical, practical and clinical sessions. Skills acquisition will require practical and clinical sessions.

Different approaches are described for each teaching methodology with different outcomes. The approaches selected for the theoretical, practical and clinical teaching are inter-related and complementary, with the aim of covering all the IMCI learning objectives of the teaching programme regardless of the approach selected.

Note: The “approach” included under each teaching methodology does not necessarily imply that it is the only option for teaching IMCI. It is recommended that the approaches are used alone or in combination according to the situation and resources of each institution.

A. Theoretical sessions

Aim

- To inform students about the IMCI strategy: definition, objectives, components and guidelines;
- To prepare students for practical and clinical sessions.

Target

All students in the academic year, either as one group in a plenary session or divided into groups according to their rotation in the department.

Who gives the lecture

A senior paediatric teaching staff experienced in IMCI.

Teaching aids

- Equipment: laptop and data projector
- Content: IMCI e-lecture. This lecture is part of the regional IMCI pre-service education package and includes the text of presentations with photos and video clips to show signs and symptoms. It should be adapted and reviewed by the teaching staff prior to its utilization to introduce specific adaptations for the country, if any.

or

- Equipment: overhead projector
- Content: presentation on transparencies. The transparencies contain the same text as the lecture, with photos but with no video clips or audio spots. The model transparencies should be reviewed by the teaching staff who may select from or adapt them according to the country guidelines, before it is produced as transparencies.

Procedures of the session

a) **Preparation for the session.** The lecturer should:

- Decide on the slides (e-lecture) or transparencies to be used during the session according to the specific learning objectives to be covered.
- Go through the selected slides or transparencies prior to the lecture and some related technical background for the discussion and questions.
- Check that the audio-visual aids to be used during the session are functioning; check the electronic device with the adapted IMCI e-lecture and make sure that it works on the computer to be used during the session.

b) **Conduct of the session.** The lecturer will:

- Start with short introductory statements and then present the slides or transparencies of the session.
- Encourage an interactive approach during the lecture.
- Wrap up the session emphasizing the following points:
 1. IMCI is not a paediatric “subject” but an approach to manage children visiting health facilities.

2. The IMCI clinical guidelines are to be used at outpatient level for the outpatient management of children under 5 years of age, whether in the hospital, health centre or community. The lecturer will describe the importance of the outpatient facilities as the first and subsequent encounters of children with the health system. The lecturer will also describe the situation at outpatient level, where there are usually no facilities to conduct full medical investigations of children—including laboratory or X-ray facilities - and a minimum number of essential medicines available.
3. IMCI clinical guidelines follow a syndromic approach, are action-oriented and provide empirical treatment. This complements the classical paediatric clinical teaching.

Two approaches are suggested for this type of session according to the expected outcome of the theoretical sessions and the time allocated to each type of teaching methodology (theoretical, practical and clinical).

Approach 1: Introductory lecture

Expected duration

1–2 hours

Learning objectives

By the end of the lecture, the students will be able to:

- Define the IMCI strategy.
- List the objectives of the IMCI strategy.
- List the three components of the IMCI strategy.
- Recognize where to use the IMCI protocol.
- Recognize the set of IMCI reference materials, e.g. chart booklet, wall charts, including the relevant sections in the paediatric department textbook, if it exists.
- List the common child health problems addressed by the IMCI protocol.

Approach 2: Series of three lectures

This approach comprises the introductory lecture of approach 1, with two additional plenary lectures on a general overview of the structure of the IMCI guidelines and content of the country specific IMCI algorithm.

Expected duration

Total 6 hours (2 hours for each of the 3 plenary lectures).

Learning objectives

By the end of the lecture, the students will be able to:

- Define the IMCI strategy.
- List the objectives of the IMCI strategy.
- List the three components of the IMCI strategy.
- Recognize where to use the IMCI protocol.
- Recognize the set of IMCI reference materials e.g. chart booklet, wall charts, including the relevant sections in the paediatric department textbook, if there is one.
- List the common child health problems addressed by the IMCI protocol.

- Describe the process of child case management including:
 - the flow of the IMCI algorithm in the chart
 - steps of the IMCI child case management.
- Recognize the different sections of the IMCI national clinical guidelines (signs and symptoms).

B. Practical sessions

Aim

- To prepare students for clinical sessions; the practical sessions thus represent a transition between theoretical and clinical sessions;
- To strengthen selected skills as complement to clinical sessions, in case of inadequate exposure to all the signs and symptoms which are included in the country adapted IMCI clinical guidelines.

Target

All students, divided into groups according to their rotation in the department.

Who conducts these sessions

A teaching staff experienced in IMCI.

Expected duration

Four practical sessions, 2 hours each.

Six approaches are suggested for this group of sessions. A combination of two or more of these approaches is highly recommended to reinforce learning. The use of variable teaching methodologies and approaches is essential to ensure comprehensive skills and knowledge acquisition.

The teaching department might allocate marks to students according to their performance during the practical sessions, where they have exercises to be answered.

Approach 1: Seminar, prepared by the students

This should be applied after the students have been exposed to IMCI through lecture, i.e. theoretical sessions, and at least one clinical session.

Learning objectives

This type of session will help to strengthen the self-learning and participatory skills of students.

By the end of the session, the students will be able to:

- Describe:
 - a) **Management of the sick child age 2 months up to 5 years**
 - Section on general danger signs and acute respiratory infections (ARI)
 - Section on diarrhoea
 - Section on ear problem, throat problem and fever
 - Section on malnutrition and anaemia, and checking vaccination status
 - b) **Management of the sick young infant**
 - Sections on serious conditions and jaundice
 - Section on diarrhoea
 - Section on feeding problems and vaccination status.

- Use the set of IMCI reference materials, e.g. chart booklet, wall charts, including the relevant sections of the pediatric department textbook, if there is one.
- Recognize the common child health problems addressed by the country IMCI clinical guidelines.

Teaching aids

- Equipment: laptop computer and data projector
 - Content: IMCI e-seminar prepared by the students with photos, video clips or audio spots.
- or
- Equipment: overhead projector
 - Content: seminar on transparencies. Students in this case will not be asked to insert video clips or audio spots.

Procedures of the session

a) Preparation for the session. The teacher should:

- Divide the students into groups, the size of which depends on the number of students per rotation in each teaching unit; the higher the number of groups, the smaller the number of students per group and the higher the chances of every student contributing to the seminar.
- Assign to each group a section of the IMCI clinical guidelines and cover “Assess and Classify”, “Identify treatment”, “Treat the child”, “Follow up” and “Counsel the mother”.
- Assign time for the seminar preparation for each group of students.
- Guide students on the reference materials to be used to search for information and prepare the presentation for the seminar, such as:
 - IMCI chart booklet
 - IMCI modules
 - IMCI photo booklet (CD)
 - IMCI video tape (CD)
 - IMCI reference materials (CD)
 - Regional IMCI e-learning material.
- Decide on the number of slides or transparencies per topic.
- Assist and supervise students during their preparatory work and seminar.
- Assist students to check the audio-visual aids before the seminar.
- Prepare a set of questions relevant to each section for group discussion, linking the technical content of the seminar to the classical teaching of paediatrics (e.g. in the section on general danger signs, points for discussion may address possible causes of convulsions, lethargy or unconsciousness, the differential diagnosis of general danger signs, investigations to be carried out for the patient with convulsions in settings where facilities are available, etc.).

b) Conduct of the session. The teacher will:

- Start with short introductory statements, highlighting the objectives of the seminar.
- Ask each group to present their assignments in turn.
- Carry out a competition game:
 - Lead a short discussion, after the presentation by each group, using the prepared set of questions.

- Divide the students into two groups and ask each group to prepare questions on the presentations made. Give them 10 minutes to prepare questions.
- Invite them to ask the questions and moderate the discussion by commenting on the relevance of the questions as appropriate, complementing answers.
- Keep track on a board of the scores of each group.
- Summarize the key points after each answer.
- Wrap up the session, emphasizing that this is a syndromic action-oriented approach, which relies upon a few simple signs and symptoms and provides empirical treatment, and that the guidelines are applied at all primary health care facilities and do not contradict the classical paediatrics taught in the university.

Approach 2: Video demonstration and video exercises

These sessions should, preferably, be conducted prior to the clinical sessions (they do not replace the clinical sessions), or in parallel if not enough signs are present in patients for demonstration and practice. These sessions should convene a group of students not exceeding 15, including mainly those who are assigned to a specific teaching unit during the paediatric rotation.

Learning objectives

By the end of the video sessions, the students will be able to:

- Assess and classify illness in children age 2 months up to 5 years.
- Assess and classify a sick young infant.
- Use the case recording form to record information on child illness through video exercises.

Teaching aids

Equipment: laptop computer and data projector

- Content: video demonstration of signs, clinical conditions and cases by the different sections of the IMCI video (CD or DVD) and relevant video exercises
- Case recording forms and/or forms for recording answers to exercises.

or

- Equipment: TV set and video (for tapes) or CD/DVD player
- Content: IMCI video tape (3 volumes) or CD / DVD
- Case recording forms and/or forms for recording answers to exercises.

Procedures of the session

- Preparation for the session.** The teacher should:
 - Check the CD/DVD or video tape prior to the session and ensure it is of high quality.
 - Check the audio-visual equipment.
 - Revise the content of each session and select the exercises to be discussed during the sessions.
 - Prepare the necessary forms or case recording forms according to the number of students per session, for the students to record their answers to the video exercises.
- Conduct of the session.** The teacher will:
 - Start with short introductory statements, highlighting the objective of the video session.
 - Run the selected section of the video-tape or CD/DVD for the session.

- Make sure that all students can clearly see the video demonstration.
- Clearly explain to the students the video exercises.
- Explain the recording form (if not done yet during a clinical session) that will be used during the video exercises to record the answers.
- Stop the video-tape/ lap top and lead a group discussion after each exercise, involving all students.
- Wrap up the session, highlighting the most important points that emerged from the group discussion.

Approach 3: Photo exercises

These sessions should preferably be conducted before the clinical sessions or, alternatively, in parallel if not enough signs are present in patients for demonstration and practice. These sessions should convene a group of students not exceeding 15, including mainly those who are assigned to a specific teaching unit during the paediatric rotation.

Learning objectives

By the end of the session, the students will be able to recognize:

- Different signs included in the IMCI clinical guidelines, such as:
 - sunken eyes
 - skin turgor
 - palmar pallor
 - severe wasting
 - measles rash
 - clouding of the cornea
 - mouth ulcers
- Correct positioning and attachment for breastfeeding.

Teaching aids

- Equipment: laptop computer and data projector
- Content: IMCI CD with photographs (related to the signs) or photo booklet
- Selected exercises from the two IMCI modules: “Assess and classify sick child age 2 months up to 5 years” and “Management of the sick young infant up to 2 months”.

or

- Content: photo booklet
- Selected exercises from the IMCI modules “Assess and classify sick child age 2 months up to 5 years” and “Management of the sick young infant up to 2 months”.

Procedures of the session

a) **Preparation for the session.** The teacher should:

- Check the CD/DVD with the photographs before the session or if not available, prepare enough copies of the photo booklet according to the number of students in each session.
- Check the audio-visual equipment.
- Select the photos for the session and discussion.
- Select the photo exercises based on the IMCI modules “Assess and classify sick child age 2 months up to 5 years” and “Management of the sick young infant up to 2 months”.

- Prepare enough copies of the forms to record the answers to the photo exercises according to the number of students per session.
- b) **Conduct of the session.** The teacher will:
- Start with short introductory statements, highlighting the objective of the session.
 - Run the CD/DVD with photographs (or distribute the photo booklet and inform the students of which photographs to observe).
 - Lead a group discussion after demonstration of each photograph, and make sure that all students are able to recognize the sign shown. This discussion should include the definition of the sign, how to recognize it and how to use it for the classification of the child's illness.
 - Involve every student in the group discussion.
 - Demonstrate how to solve one or two photo exercises.
 - Distribute the forms to record the answers to the photo exercises.
 - Ask students to look at the photos and answer individually, and then run a group discussion or provide individual feedback if time allows to discuss the students' answers after each photo exercise.
 - Wrap up the session, highlighting the most important points emerged from the group discussion.

Approach 4: Role play using communication techniques for counselling mothers

Learning objectives

By the end of the session, the students will be able to:

- a) **List the communication skills.**
- b) **Practise the communication techniques to counsel the mother on:**
- when to come back immediately
 - when to return for a follow-up visit
 - how to administer medicines
 - home care (including feeding practices)
 - referral.

Teaching aids

- Background story for the role plays
- Roles of mothers and health care providers
- Supplies required for role plays such as doll, cups and spoons and medicines.

Procedures of the sessions

- a) **Preparation for the session.** The teacher should:
- Prepare three different background stories for role plays and roles of mothers and health care providers from the module "Counsel the mother".
 - Check the supplies required to conduct the role play.

b) **Conduct of the session.** The teacher will:

- Start with a description of the communication techniques and different situations for counselling the mother as per the IMCI clinical guidelines.
- Assign role plays to students and explain how to conduct the role play, giving them 5 minutes to prepare for and 10 minutes to perform each role play.
- Explain the objectives of the role play to the rest of students.
- Ask the students to follow each role play and write down which communication techniques were used correctly and which ones were missed or used incorrectly, and whether the caretaker had correct knowledge about the advice received.
- Lead a group discussion, at the end of the role play, highlighting which communication techniques were used correctly and which ones were missed or incorrectly used, asking students about their impressions on whether the “caretaker” was able to know the advice received and about their opinion on the quality of counselling given by the “health care provider”.
- Select two other students to perform the second role play and then other two students for the third role play following the same procedures as for the first role play.
- Wrap up the session, highlighting the most important points that emerged during the group discussion.

Approach 5: Demonstration and practice of skills

Situation 1: Skill lab is available

Situation 2: Skill lab is not available

This session aims at providing students with more opportunity to practise selected skills, in preparation for (and not in replacement of) the clinical sessions. These sessions should convene a group of students not exceeding 15, including mainly those who are assigned to a specific teaching unit during the paediatric rotation. More than one session would be required for each student to practise all the skills in line with the learning objectives.

Learning objectives

Situation 1: Skill lab available

By the end of the session, the student will be able to:

- Give intramuscular injection
- Set an IV line, if relevant
- Help the mother position her baby correctly for breastfeeding
- Weigh a child using different scales (baby scale, adult scale)
- Plot the weight on the growth curve and interpret it
- Measure the temperature
- Prepare ORS and determine the dose according to different treatment plans
- Prepare the first dose of antibiotics
- Perform a skin pinch
- Examine the throat
- Dry ear by wicking
- Treat local infection.

Situation 2: Skill lab not available

By the end of the session, the student will be able to:

- Help the mother position her baby correctly for breastfeeding
- Weigh a child using different scales (baby scale, adult scale)
- Plot the weight on the growth curve and interpret it
- Measure the temperature
- Prepare ORS and determine the dose according to different treatment plans
- Prepare the first dose of antibiotics
- Perform a skin pinch
- Examine the throat
- Dry ear by wicking
- Treat local infection.

Teaching aids

- ORS packets
- Mannequin
- Doll
- Weighing scales (for baby and older child)
- Thermometer
- Growth charts
- Graduated container to measure amount of water to mix with an ORS packet
- Container to mix ORS
- Cups and spoons
- Table to determine amounts of ORS according to treatment plan (from IMCI chart booklet)
- Table on antibiotics dosage (from IMCI chart booklet)
- Bottles of antibiotics
- Syringes and needles
- Tissue for wicking
- Dyes

Procedures of the session

- a) **Preparation for the session.** The teacher should check that all the required supplies are present before the session.
- b) **Conduct of the session.** The teacher will:
 - Start with short introductory statements, highlighting the objectives of the session.
 - Demonstrate the skills according to the facility where the session is conducted.
 - Request each student to perform each skill.
 - Supervise each student practising the skills and provide feedback.
 - Make sure that all students have practised all the skills included in the session.
 - Wrap up the session, highlighting the most important points from his/her observation of the practice of the skills by students during the session.

Approach 6: Case scenario

Learning objectives

By the end of the session, the students will be able to apply their knowledge of the different tasks and steps of the IMCI clinical guidelines to the management of children age 0–5 years old, according to the information provided in the case scenario.

Some of the case scenarios can be administered at the end of the session as part of the formative assessment of students scoring their answers. Teaching departments should indicate marks to be given to those sessions accordingly. Remember that the main aim is not to examine students but rather to enforce learning by providing feedback.

Teaching aids

- Set of case scenarios. Source: IMCI question bank and IMCI modules
- Enough copies of case scenarios for each student
- IMCI chart booklet (each student should bring his/her own copy)
- Equipment: laptop computer and projector, or overhead projector and transparencies (for demonstration and group feedback)

Procedures of the session

a) **Preparation for the session.** The teacher should:

- Prepare a set of five case scenarios ensuring that the content is consistent with the IMCI teaching conducted until then.
- Prepare enough copies to be distributed to the students.
- Select an example of a case scenario to demonstrate on screen how to solve it.

b) **Conduct of the session.** The teacher will:

- Start with a short description of the objectives of the session and the difference between the types of questions included in each case scenario (steps and tasks of the IMCI guidelines).
- Demonstrate how to solve a case scenario, using the available audio-visual equipment, followed by a group discussion with the students.
- Distribute the set of five case scenarios to the students.
- Ask the students to read the first case scenario carefully and answer the questions within a given time.
- When they have completed the first case scenario, review with them each question as a group discussion, referring back to the IMCI chart booklet as needed.
- Ask the students to complete the second case scenario and then review it with them as with the first one; and repeat the process with the third case scenario.
- Ask the students to complete the fourth and, if time allows, fifth case scenario within a given time, explaining that their answers to these last case scenarios will be scored and used as part of their formative assessment.
- Collect the fourth (and fifth) case scenario from each student as they complete it.
- When all the students have finished, review each question with them as a group discussion, referring back to the IMCI chart booklet as needed.
- Wrap up the session highlighting the most important points that emerged during the group discussion with the students.

C. Clinical sessions

Aim

Clinical sessions aim at enabling students to acquire skills in an outpatient setting for all tasks of child case management according to the IMCI clinical guidelines by dealing with actual sick children under 5 years of age and their caretakers. Clinical practice is an opportunity to integrate knowledge, skills and attitudes.

Clinical sessions for skills acquisition and the correct application of the standardized IMCI protocol are at the core of the IMCI teaching. Therefore, they should be given ample time and students should practise as much as possible. Clinical management of sick under-5 children with different conditions should be conducted at least once per week during the paediatric rotation (outpatient teaching).

The organization of the clinical sessions depends on the availability of a teaching site at the outpatient department, the number and type of cases and the number of students in the small group.

Target

All students divided into groups according to their rotation in the department.

Who conducts these sessions

A teaching staff experienced in IMCI.

Expected duration

The total number of sessions depends on the total duration of the paediatric rotation. A minimum of 6 sessions is recommended. Any additional session would be used to practise the full process of integrated assessment, classification, identification of treatment and counselling of sick children and sick young infants.

Learning objectives

By the end of the clinical sessions, the student will be able to assess, classify and identify treatment for a sick child in an integrated and effective way and counsel the child's caretaker following the step-wise approach of the IMCI clinical guidelines. More specifically:

a) **By the end of the first four sessions, the student will be able to:**

- Use the chart for the management of the sick child age 2 months up to 5 years.
- Ask what the child's problems are.
- Assess and classify the child as follows.

GENERAL DANGER SIGNS

- Check for general danger signs
 - unable to drink or breastfeed
 - has had convulsions
 - convulsing now
 - lethargic or unconscious

- Recognize the presence of general danger signs
- Classify a child with a general danger sign

COUGH OR DIFFICULT BREATHING

- Assess a child with cough or difficult breathing
 - Recognize chest indrawing
 - Recognize stridor
 - Recognize wheeze
 - Count the child's respiratory rate
 - Identify fast breathing
- Classify a child with ARI according to the signs

DIARRHOEA

- Assess a child with diarrhoea for dehydration
 - Check for restless and irritable child
 - Check for thirst
 - Pinch the skin to assess skin turgor
 - Check for sunken eyes
 - Recognize the presence of signs of dehydration
- Classify the child who has diarrhoea for dehydration
- Ask about the duration of diarrhoea
- Recognize the presence of persistent diarrhoea
- Classify the child who has persistent diarrhoea
- Check for the presence of blood in the stools
- Classify the child who has bloody diarrhoea (dysentery)

FEVER

- Assess the child for fever
 - Measure the child's temperature
 - Check for stiff neck
 - Recognize pus draining from the eye
 - Recognize clouding of the cornea
 - Recognize mouth ulcers
 - Classify the risk of malaria in the area where the child is living or coming from.
 - Recognize the signs of measles: runny nose, red eyes, generalized rash
 - Recognize if the child has another bacterial cause of fever.
- Classify the child with fever according to the signs

THROAT PROBLEM

- Check if the child has a throat problem
 - Check for enlarged cervical lymph nodes
 - Check for white or yellow exudate on the tonsils
 - Check for red throat
 - Recognize the signs of streptococcal sore throat
- Classify the child for a throat problem according to the signs

EAR PROBLEM

- Assess the child with an ear problem
 - Check for swelling behind the ear
 - Recognize the presence of the swelling behind the ear
 - Check for ear pain
 - Check for ear discharge
 - Check for the duration of ear discharge
 - Recognize the presence of the signs of acute and chronic otitis media
- Classify a child for ear problem according to the signs

NUTRITIONAL STATUS

- Assess the child's nutritional status
 - Weigh the child
 - Plot the child weight on the growth chart and interpret it
 - Check for oedema of both feet
 - Check for visible severe wasting.
 - Recognize the clinical signs of severe malnutrition
- Classify the nutritional status of the child accordingly

ANAEMIA

- Assess the child for anaemia
 - Check for palmar pallor
 - Recognize the presence of palmar pallor
 - Recognize the severity of palmar pallor
- Classify the child for anaemia

CHECK IMMUNIZATION STATUS

- Check the child immunization status

CHECK VITAMIN A SUPPLEMENTATION STATUS

- Check the child vitamin A supplementation status

ASSESS OTHER PROBLEMS

- Ask and check to see if the child has other problems

IDENTIFY TREATMENT, TREAT AND COUNSEL THE MOTHER

- Identify treatment for a child with the following conditions:
 - very severe disease
 - cough or difficult breathing
 - diarrhoea
 - throat problem
 - ear problem
 - fever
 - malnutrition
 - anaemia
- Identify whether the child needs a vaccination now
- Indicate the date of the next due vaccination
- Identify whether the child needs vitamin A supplementation
- Provide pre-referral treatment for a child with very severe disease
- Give first dose of intramuscular antibiotics

- Determine the dose of the oral medicine, if indicated (antibiotics, anti-malarials, antipyretics, bronchodilators, zinc and iron) and give the first dose at the health facility and teach the mother how to give oral medicine at home
- Administer a rapid acting bronchodilator
- Correctly prepare, determine the amount of and administer ORS
- Counsel the mother of a child with cough or difficult breathing and throat problem on soothing the throat
- Counsel the mother of a child with diarrhoea on the dehydration treatment plan
- Counsel the mother of a child with an ear problem on ear wicking (if indicated)
- Counsel the mother of a child who has persistent diarrhoea, who is very low weight for age, has anaemia or a feeding problem on child feeding
- Counsel the mother on the date of the next vaccine (if applicable)
- Counsel the mothers of all sick children on:
 - treatment to be given to the child at home, if applicable
 - the three rules of home care
 - when to return immediately
 - when to return for follow-up visit (if applicable)
 - the date of the next vaccination (if applicable)
 - the date of the next vitamin A dose (if applicable)

Clinical sessions focus on specific sections of IMCI clinical guidelines as follows:

- *Session 1:* covers the learning objectives related to general danger signs, cough and diarrhoea.
- *Session 2:* covers the learning objectives related to fever, sore throat and ear problem.
- *Session 3:* covers the learning objectives related to nutritional status, anaemia, checking vaccination and vitamin A supplementation status and assessment of other problems.
- *Session 4:* covers the learning objectives related to identify, treat and counsel the mother.

At the same time, each session should build on the previous one to enable the student to go through all the steps s/he learnt throughout the clinical sessions according to IMCI clinical guidelines (i.e. stepwise approach).

b) By the end of sessions 5 and 6 the student will be able to:

- Refer to and use the section of the IMCI chart related to the case management of sick young infants 0–2 months of age.
- Ask what the sick young infant's problems are.
- Assess and classify the sick young infant as follows.

BACTERIAL INFECTION

- Check for signs of bacterial infection:
 - unable to breastfeed
 - convulsing
 - unconscious
 - fast breathing
 - severe chest indrawing
 - fever
 - low body temperature
 - less movement or no movement at all
 - bulging fontanelle

- skin pustules
- pus draining from umbilicus
- redness of the umbilicus
- Recognize the presence of signs of bacterial infections in a sick young infant
- Classify the sick young infant according to the signs

JAUNDICE

- Check for the presence of jaundice
- Recognize the presence and extension of jaundice
- Define the birth weight of a young infant

DIARRHOEA

- Recognize the signs of dehydration:
 - Check for thirst
 - Recognize the signs of dehydration
- Classify the sick young infant accordingly
- Recognize the signs of blood in the stools

FEEDING PROBLEM

- Check if the young infant has a feeding problem
- Recognize the signs for difficult feeding in a sick young infant
- Assess and correct young infant attachment and positioning to breast
- Check for the presence of thrush or white patches
- Define the weight of a young infant
- Classify the sick young infant accordingly

CHECKING IMMUNIZATION STATUS

- Check the immunization status of a young infant

IDENTIFY, TREAT AND COUNSEL THE MOTHER OF A SICK YOUNG INFANT

- Identify the treatment of the following conditions:
 - bacterial infection
 - jaundice
 - diarrhoea
 - feeding problem
- Identify whether the young infant needs a vaccination now
- Provide pre-referral treatment for a young infant with very severe disease
- Demonstrate how to make sugar water
- Give first dose of intramuscular antibiotics
- Determine the dose of the oral drug, if indicated (antibiotics, antipyretics and zinc), and give the first dose at a health facility and teach the mother how to give oral medicine at home.
- Counsel the mother of a young infant with diarrhoea on:
 - dehydration treatment plan
 - how to prepare and administer ORS
- Counsel the mother of a young infant with a feeding problem on breastfeeding (positioning, attachment and other related problems)
- Counsel the mothers of all sick young infants on:
 - the treatment to be given to the young infant at home
 - the three rules of home care

- local treatment (if any)
- when to return immediately and
- when to come back for follow-up visit.

Session 5: covers learning objectives related to bacterial infection and jaundice.

Session 6: covers learning objectives related to diarrhoea, feeding problems and immunization.

Teaching aids

- Suitable teaching site
- IMCI chart booklets
- IMCI wall charts
- IMCI case recording forms by age group
- Tongue depressors
- Thermometers
- Functioning weighing scales for young infants and older children
- Growth charts by gender
- Timers (if available)
- IMCI mothers' cards
- Medicines
- ORS sachets
- Cups and spoons (and other utensils required for mixing and measuring ORS)
- Nebulizer/spacer device
- Materials for wicking of the ear
- Disposable syringes

Procedures of the clinical sessions

a) **Preparation for the session.** The teacher should:

- Review the proposed learning objectives and modify them according to the country specific adaptation of the IMCI clinical guidelines and the duration allocated to the clinical sessions.
- Identify the clinical teaching site.
 - An outpatient department, if there is sufficient space available and enough chairs for students and caretakers, is the ideal setting to demonstrate to students common signs and symptoms in sick young infants.
 - If this is not feasible, a space should be arranged in a convenient place according to availability; patients will need to be brought to this place.
 - A neonatal department is appropriate to demonstrate signs of severe illness in sick young infants, because not many newborns attend outpatient facilities.
- Inform the clinical assistant of the signs and type of cases required for the teaching session, according to the learning objectives, and agree on the number of cases needed, according to the number of students in the group. Ideally, every student should examine at least one sick child during the session. If there are not enough cases or there is not enough space, students can be divided into smaller groups (maximum three students each) with each group examining the same sick child in turn.

- Ensure that the clinical assistant knows the signs to be present in the cases selected for clinical demonstration.
- Ensure that all the teaching aids are available before the beginning of the session.

b) **Conduct of the session.** The teacher will:

- Inform the students about the objectives of the session.
- Give a demonstration on the wall chart of how to use the relevant section during the clinical session.
- Demonstrate how to assess a sick child or young infant: this demonstration should not take more than 20 minutes.
- Explain – after the clinical demonstration – how to proceed during the session.
- Distribute the IMCI case recording forms to the students and assign cases to them.
- Assign an hour to students to complete their clinical assessment.
- Supervise the students and provide feedback on the assessment procedures and filling of the recording forms.
- Request each student to present his/her case to the group demonstrating the signs present. Facilitate group discussion on different signs and classifications during the presentation, to make sure that all students are exposed to the signs.
- Emphasize the consistency of and link between the IMCI outpatient case management approach and the classical teaching approach to avoid confusion of the students.
- Assign, if possible, other patients to be presented by other students if there is time to do so.
- Take note of the names of students who have already presented, so that next session the remaining students will have a chance of presenting.
- Wrap up the session showing that all learning objectives have been covered and highlighting the most important points that emerged from the discussion.

Notes:

1. It is very important for the student to understand clearly that, in every session, they are building upon the previous sections of the guidelines in a stepwise manner until they are able to practise the holistic integrated management of the sick child.
2. The teaching programme should determine the minimum number of sick children to be examined and managed by each student and whether marks will be given to students according to their performance during the clinical sessions. Therefore the teacher should:
 - Monitor the number of sick children examined by each student ensuring that each examined the required minimum number.
 - Allocate marks to the students according to the policy set by the department.



Healthy child

Teaching methodology

Care for healthy children is included in the guidelines of several countries in the Region. The following section provides guidance on a methodology for teaching this component.

Content of the healthy child module: the generic regional package for healthy children (0–5 years)

- Checking immunization status of the child.
- Regular weighing of the child.
- Monitoring child's growth by plotting weight on the growth chart and interpreting the child's growth curve.
- Assessing the child's feeding according to the child's age.
- Counselling the mother on the child's feeding according to the child's feeding assessment and growth curve.
- Recognition of the development milestones of children age 0–5 years of age.
- Counselling the mother on child development.
- Early recognition of visual defects and managing the child accordingly.
- Early recognition of hearing defects and managing the child accordingly.
- Care for development: stimulation of the child's psychosocial development.
- Counselling the mother on care for development.
- Recognition of risks at home to which children 0–5 years are exposed, in order to prevent home accidents.
- Counselling the mother on prevention of home accidents according to the child's age.
- Hygiene measures for children 0–5 years.
- Counselling the mother on child hygiene according to the child's age.
- Oral hygiene measures for children 0–5 years.
- Counselling the mother on child oral hygiene according to the child's age.

Requirements for teaching healthy child care

- a) **Teaching materials:** healthy child module, photo booklet, video tape, CD
- b) **Training site:** healthy child clinics.

As with the sick child module there are three types of sessions to teach the healthy child module:

- A. Theoretical sessions
- B. Practical sessions
- C. Clinical sessions

A. Theoretical sessions

Aim

- To inform students about the rationale and content of the healthy child care module
- To prepare students for practical and clinical sessions.

Approach 1: Lecture for students

Expected duration

1–2 hours

Learning objectives

By the end of the lecture, the students will be able to:

- Define the IMCI strategy.
- Recognize the rationale of caring for healthy children.
- List the steps of providing health care for healthy children.
- Recognize where to use the healthy child module.
- Recognize the training materials for caring for the healthy child.

Target

All students in the academic year, either as one group in a plenary session or divided into groups according to their rotation in the department.

Who gives the lecture

A senior paediatric teaching staff experienced in IMCI.

Teaching aids

- Equipment: laptop computer and data projector
- Content: the lecture entitled “IMCI: care for healthy child”. This includes:
 - a definition of the IMCI strategy that states that care for the healthy child is part of it. It shows that the IMCI strategy addresses care for healthy children in primary health care (health facility and community) in order to strengthen the promotive and preventive aspects of child health.
 - the rationale of care for healthy children.
 - description of the steps of care for healthy children.
 - description of how to use the guidelines for caring for healthy children.
 - description of the healthy child training material.

Like the lecture on the sick children, this lecture is divided into two sections: the first is a general section and the second provides details on healthy children guidelines following the same process as that for the sick child. Photos, video clips and audio spots might be added if available and as appropriate.

This lecture should be reviewed by the staff prior to using it and specific adaptations should be introduced accordingly.

or

- Equipment: overhead projector
- Content: lecture on transparencies. The transparencies contain the same text as the lecture, with photos but with no video clips and audio spots. The model transparencies should be reviewed by the teaching staff who may select from or adapt them according to the country guidelines.

Procedures of the session

a) **Preparation for the session.** The lecturer should:

- Decide on the slides (e-lecture) or transparencies to be used during the session according to the specific learning objectives to be covered.
- Go through the selected slides or transparencies prior to the session and related technical background for the discussion and questions.
- Check that the audio-visual aids are functioning; check the electronic device with the adapted e-lecture and make sure that it works on the computer to be used during the session.

b) **Conduct of the session.** The lecturer will:

- Start with short introductory statements and then present the slides or transparencies of the session.
- Encourage an interactive approach during the lecture.
- Wrap up the session emphasizing the following points:
 1. Caring for healthy children is essential for the well-being of children.
 2. The relevant guidelines are to be used at outpatient level at different settings providing healthy child care.
 3. In addition to the tasks of examining the child for milestones, etc., the healthy child module depends mainly on counselling and communication skills.

B. Practical sessions

Notes:

- All six approaches of the practical sessions proposed for the sick child management component of IMCI can be used for teaching the healthy child module (according to country adaptation and available materials). Recognizing that care for the healthy child relies mainly on counselling, focus should be given to approach 4 (role play), where emphasis is on communication/counselling techniques.
- The procedures are the same as those described under the practical sessions.
- The learning objectives of the different approaches and materials used during the sessions are subject to adaptation by countries and other available materials, in addition to WHO materials.

Aim

- To prepare students for clinical sessions; the practical sessions thus represent a transition between theoretical and clinical sessions;
- To strengthen selected skills as complement to clinical sessions, in case of inadequate exposure to all the steps of caring for the healthy child according to the country guidelines.

Target

All students, divided into groups according to their rotation in the department.

Who conducts these sessions

A teaching staff experienced in the subject.

Expected duration

Two practical sessions, 2 hours each, using a combination of the approaches, are recommended.

The teaching department might allocate marks to students according to their performance during the practical sessions, where they have exercises to be answered.

Approach 1: Seminar, prepared by the students

This should be conducted after the students have been exposed to care for healthy children through lecture, i.e. theoretical sessions.

Learning objectives

This type of session will help to strengthen the self-learning and participatory skills of students.

By the end of the session, the students will be able to:

- a) Describe the steps of caring for the healthy child 0–5 years:
 - Checking immunization status of the child
 - Regular weighing of the child
 - Monitoring child's growth by plotting weight on the growth chart and interpreting the child's growth curve
 - Assessing the child's feeding according to the child's age

- Counselling the mother on the child's feeding and growth curve
- Recognition of the 0–5 years child development milestones
- Counselling the mother on child development
- Early recognition of visual defects
- Early recognition of hearing defects
- Care for development
- Counselling the mother on care for development
- Recognition of risks to which children 0–5 years are exposed, in order to prevent home accidents
- Counselling the mother on prevention of home accidents according to the child's age
- Hygiene measures for children 0–5 years
- Counselling the mother on child hygiene according to the child's age
- Oral hygiene measures for children 0–5 years
- Counselling the mother on child oral hygiene according to the child's age.

Teaching aids

- Equipment: laptop computer and data projector
 - Content: IMCI e-seminar prepared by the students with video clips or audio spots.
- or
- Equipment: overhead projector
 - Content: seminar on transparencies. Students in this case will not be asked to insert video clips or audio spots.

Procedures of the session

- a) **Preparation for the session.** The teacher should:
- Divide the students into groups, the size of which depends on the number of students per rotation in each teaching unit; the higher the number of groups, the smaller the number of students per group and the higher the chances of every student contributing to the seminar.
 - Assign to each group a section of the care for healthy child clinical guidelines.
 - Assign time for the seminar preparation for each group of students.
 - Guide students on the reference materials to be used to search for information and prepare the presentation for the seminar, such as:
 - healthy child module
 - healthy child chart booklet
 - different sections of paediatric textbooks.
 - Decide on the number of slides or transparencies per topic.
 - Assist and supervise students during their preparatory work and seminar.
 - Assist students to check the audio-visual aids before the seminar.
 - Prepare a set of questions relevant to each section for group discussion.
- b) **Conduct of the session.** The teacher will:
- Start with short introductory statements, highlighting the objectives of the seminar.
 - Ask each group to present their assignments in turn.

- Lead a short discussion, after the presentation by each group using the prepared set of questions.
- Carry out a competition game:
 - Divide the students into two groups and ask each group to prepare questions on the presentations made. Give them 10 minutes to prepare questions;
 - Invite them to ask the questions and moderate the discussion by commenting on the relevance of the questions as appropriate, complementing answers;
 - Keep track on a board of the scores of each group;
 - Summarize the key points after each answer.
- Wrap up the session, emphasizing that care for children should not focus only on managing sick children, but should start with caring for healthy children which will ensure healthy growth and development of the child from birth.

Approach 2: Video demonstration and video exercises

These sessions should, preferably, be conducted prior to the clinical sessions (they do not replace the clinical sessions), or in parallel if not enough signs are present in children for demonstration and practice. These sessions should convene a group of students not exceeding 15, including mainly those who are assigned to a specific teaching unit during the paediatric rotation.

Learning objectives

These will depend on the video tapes available. Currently, only breastfeeding is available as a video demonstration that can be used for the healthy child module. Teaching institutions are encouraged to adapt their learning objectives for this approach according to the available materials. The following learning objectives are set based on the available video materials (IMCI video and video prepared for the course on “Counselling on infant and young child feeding”.

By the end of the session, students will be able to:

- Assess the positioning for breastfeeding.
- Assess the attachment for breastfeeding.
- Correct positioning and attachment of the child to the breast.
- Counsel the mother on early initiation of breastfeeding.

Teaching aids

- Equipment: laptop computer and data projector
- Content: IMCI video tape/ CD/DVD (part of assessment of breastfeeding)
- Breastfeed observation form

or

- Equipment: TV set and video (for tapes) or CD/DVD player
- Content: IMCI video tape (3 volumes) or CD/DVD
- Breastfeeding observation form.

Procedures of the session

- a) **Preparation for the session.** The teacher should:
- Check the CD/DVD or video tape prior to the session and ensure it is of high quality.
 - Check the audio-visual equipment.
 - Revise the content of each session and select the exercises to be discussed during the sessions.
 - Prepare the necessary forms for observation of the breastfeeding or case recording forms according to the number of students per session for the students to record their answers to the video exercises.
- b) **Conduct of the session.** The teacher will:
- Start with short introductory statements, highlighting the objective of the video session.
 - Run the selected section of the video-tape or CD/DVD for the session.
 - Make sure that all students can clearly see the video demonstration.
 - Clearly explain to the students the video exercises.
 - Explain the recording form (if not done yet during a clinical session) that will be used during the video exercises to record the answers.
 - Stop the video-tape/lap top and lead a group discussion after each exercise, involving all students.
 - Wrap up the session, highlighting the most important points emerged from the group discussion.

Approach 3: Photo exercises

These sessions should preferably be conducted before the clinical sessions or, alternatively, in parallel if not enough children are available at the training site for practice. These sessions should convene a group of students not exceeding 15, including mainly those who are assigned to a specific teaching unit during the paediatric rotation.

Learning objectives

By the end of session, the students will be able to:

- Recognize correct attachment and positioning for breastfeeding
- Recognize feeding recommendations for different ages
- Recognize risks to which the child is exposed at different ages, in order to prevent home accidents
- Recognize care for development, i.e. play and communicate with children according to age.

Teaching aids

- Equipment: laptop computer and data projector
- Content: IMCI CD with photographs (related to breastfeeding), and mother cards including feeding recommendations and care for development.
- Selected exercises from the “healthy child module” on breastfeeding assessment, feeding assessment, feeding recommendations and care for development.

or

- Content: photo booklet

- Mother’s cards with feeding recommendations, care for development and accident prevention.
- Selected exercises from the healthy child module.

Procedures of the session

a) Preparation for the session. The teacher should:

- Check the CD/DVD with the photographs before the session or, if not available, prepare enough copies of the photo booklet according to the number of students in each session.
- Check the audio-visual equipment.
- Select the photos for the session and discussion.
- Select the photo exercises that exist in the “healthy child module”.
- Prepare enough copies of the mother’s cards and forms to record the answers to the photo exercises according to the number of students per session.

b) Conduct of the session. The teacher will:

- Start with short introductory statements, highlighting the objective of the session.
- Run the CD/DVD with photographs (or distribute the photo booklet, mother’s cards and inform the students of which photographs to observe).
- Lead a group discussion after demonstration of each photograph, and make sure that all students are able to recognize the sign, or the milestone shown. This discussion should include the definition of the sign/milestone, how to recognize it and how to use it to counsel the mother on the child.
- Involve every student in the group discussion.
- Demonstrate how to solve one or two photo exercises.
- Distribute the forms to record the answers to the photo exercises.
- Ask students to look at the photos and answer individually and then run a group discussion or provide individual feedback if time allows to discuss the students’ answers after each photo exercise.
- Wrap up the session, highlighting the most important points emerged from the group discussion.

Approach 4: Role play using communication techniques for counselling mothers

Learning objectives

By the end of the session, the students will be able to:

- List the communication skills.
- Practise the communication techniques to counsel the mother on:
 - breastfeeding
 - child feeding
 - child development
 - care for development
 - accident prevention
 - personal hygiene
 - oral hygiene.

Teaching aids

- Background story for the role plays
- Roles of mothers and health care providers
- Supplies required for role plays such as doll, mother's cards, toys, etc.

Procedures of the sessions

- Preparation for the session.** The teacher should:
 - Prepare three different background stories for role plays and roles of mothers and health care providers from the module "Counsel the mother".
 - Check the supplies required to conduct the role play.
- Conduct of the session.** The teacher will:
 - Start with a description of the communication techniques and different situations for counselling the mother as per the healthy child guidelines.
 - Assign role plays to students and explain how to conduct the role play, giving them 5 minutes to prepare for, and 10 minutes to perform, each role play.
 - Explain the objectives of the role play to the rest of students.
 - Ask the students to follow each role play and write down which communication techniques were used correctly and which ones were missed or used incorrectly and whether the caretaker had correct knowledge about the advice received.
 - Lead a group discussion at the end of the role play, highlighting which communication techniques were used correctly and which ones were missed or incorrectly used, asking students about their impressions on whether the caretaker understood the advice received and about their opinion on the quality of counselling done by the health care provider.
 - Select two other students to perform the second role play and then another two students for the third role play following the same procedures as for the first role play.
 - Wrap up the session, highlighting the most important points emerged during the group discussion.

Approach 5: Demonstration and practice of skills

Situation 1: Skill lab is available

Situation 2: Skill lab is not available

This session aims at providing students with more opportunity to practise selected skills, in preparation for (and not in replacement of) the clinical sessions. These sessions should convene a group of students not exceeding 15, including mainly those who are assigned to a specific teaching unit during the paediatric rotation. More than one session would be required for each student to practise all the skills in line with the learning objectives.

Learning objectives

Situation 1: Skill lab available

By the end of the session, the students will be able to:

- Help the mother position her baby correctly for breastfeeding.
- Weigh a child using different scales (baby scale, adult scale).

- Plot the weight on the growth curve and interpret it.
- Give immunization.
- Prepare food with adequate thickness.

Situation 2: Skill lab not available

By the end of the session, the students will be able to:

- Help the mother position her baby correctly for breastfeeding.
- Weigh a child using different scales (baby scale, adult scale).
- Plot the weight on the growth curve and interpret it.
- Prepare food with adequate thickness.

Teaching aids

- Mannequin
- Doll
- Weighing scales (for baby and older child)
- Growth charts
- Vaccine bottles
- Syringes
- Plate, spoon, water and powdered food

Procedures of the session

- Preparation for the session.** The teacher should check that all the required supplies are present before the session.
- Conduct of the session.** The teacher will:
 - Start with short introductory statements, highlighting the objectives of the session.
 - Demonstrate the skills according to the facility where the session is conducted.
 - Request each student to perform each skill.
 - Supervise each student practising the skills and provide feedback.
 - Make sure that all students have practised all the skills included in the session.
 - Wrap up the session, highlighting the most important points from his/her observation of the practice of the skills by students during the session.

Approach 6: Case scenario

Learning objectives

By the end of the session, the student will be able to apply his/her knowledge of the different tasks and steps of caring for healthy children. Mainly the case scenarios will focus on the tasks for caring for healthy children according to age.

Some of the case scenarios can be administered at the end of the session as part of the formative assessment of students scoring their answers. Teaching departments should indicate marks to be given to those sessions accordingly. Remember that the main aim is not to examine students but rather to enforce learning providing feedback.

Teaching aids

- Set of case scenarios. Source: healthy child module
- Enough copies of case scenarios for each student
- Healthy child chart booklet (each student should bring his/her own copy)
- Equipment: laptop computer and projector, or overhead projector and transparencies (for demonstration and group feedback)

Procedures of the sessions

- a) **Preparation for the session.** The teacher should:
 - Prepare a set of five case scenarios ensuring that the content is consistent with the IMCI teaching conducted until then.
 - Prepare enough copies to be distributed to the students.
 - Select an example of a case scenario to demonstrate on screen how to solve it.
- b) **Conduct of the session.** The teacher will:
 - Start with a short description of the objectives of the session and the difference between the types of questions included in each case scenario (steps and tasks of the care for healthy child module).
 - Demonstrate how to solve a case scenario, using the available audio-visual equipment, followed by a group discussion with the students.
 - Distribute the set of five case scenarios to the students.
 - Ask the students to read the first case scenario carefully and answer the questions within a given time.
 - Review with them each question as a group discussion, when they have completed the first case scenario, referring back to the healthy child chart booklet (if there is one) as needed.
 - Ask the students to complete the second case scenario and then review it with them, as with the first one; and repeat the process with the third case scenario.
 - Ask the students to complete the fourth and, if time allows, fifth case scenario within a given time, explaining that their answers to these last case scenarios will be scored and used as part of their formative assessment.
 - Collect the fourth (and fifth) case scenario from each student as they complete it.
 - Review each question with them as a group discussion, when all the students have finished, referring back to the healthy child chart booklet (if there is one) as needed.
 - Wrap up the session highlighting the most important points that emerged during the group discussion with the students.

C. Clinical sessions

- At least one clinical session should be dedicated for the healthy child module.
- Since care for healthy children is mainly achieved through counselling mothers, students must have learned the messages and milestones and the communication techniques before the sessions so that they will be able to practise them during these sessions.
- A well baby clinic (healthy child clinic) is the training site for these sessions. This may be available at the teaching institution. If not, a primary health care facility with a well baby clinic (healthy child clinic) can be used.

Learning objectives

The following are the full set of regional learning objectives related to healthy child care for both practical and clinical sessions. The teacher will select (and may add) the learning objectives that suit the setting and the type of session and approach being used as well as the country adaptation of the healthy child module.

By the end of the session, the students will be able to:

- Check the immunization status of a child.
- Weigh the healthy child.
- Plot the child's weight on the growth chart.
- Interpret the growth curve of the child.
- Recognize the signs of good positioning and attachment of breastfeeding.
- Counsel the mother on correct positioning and attachment for breastfeeding .
- Assess child feeding.
- Counsel the mother on child feeding.
- Assess child development.
- Recognize the development milestones.
- Recognize the risk of home accidents for different age groups of children 0–5 years.
- Counsel the mother on prevention of home accidents according to child age.
- Recognize the milestones of play and communication (care for development) for children 0–5 years.
- Counsel the mother on the child's development.
- Counsel the mother on play and communication (care for development) with the child 0–5 years old according to child's age.
- Recognize the hygiene measures for children 0–5 years old.
- Counsel the mother on hygiene of children 0–5 years old according to child's age.
- Recognize the oral hygiene measures for a child 0–5 years old.
- Counsel the mother on oral hygiene of children 0–5 years old.

Teaching aids

- Suitable teaching site
- Healthy child chart booklet
- Healthy child recording forms
- Functioning weighing scales for young infants and older children
- Growth charts by gender
- Mother's cards

- Medicines
- Plates, spoons and powdered food
- Dolls

Procedures of the sessions

a) Preparation for the session. The teacher should:

- Review the proposed learning objectives and modify according to the country-specific adaptation of the healthy child guidelines and the duration allocated to the clinical sessions.
- Identify the clinical teaching site.
 - A healthy child clinic, if ample space and enough chairs for students and caretakers are available, is the ideal setting as it is where the children are.
 - If this is not feasible, a space should be arranged in a convenient place according to availability; children will need to be brought to this place.
 - If there is an immunization service in the teaching institution, this session could be undertaken during this day.
 - If there is no site to care for healthy children, coordination can be made with the Ministry of Health to use an appropriate facility.
- Inform the clinical assistant of the children required for the teaching session, according to the learning objectives, agree on the number of cases needed, according to the number of students in the group. Ideally, every student should provide care for one child during the session. If there are not enough cases or there is not enough space, students can be divided into smaller groups (maximum three students each) with each group dealing with one child.
- Ensure that the clinical assistant knows exactly which child will be selected for clinical demonstration.
- Ensure that all the teaching aids are available before the beginning of the session.

b) Conduct of the session. The teacher will:

- Inform the students about the objectives of the session.
- Demonstrate how to manage a healthy child: this should not take more than 15 minutes.
- Explain—after the clinical demonstration—how to proceed during the session.
- Distribute the healthy child recording forms to the students and assign children to them.
- Assign ½ hour to students to complete their assessment and counselling.
- Supervise the students and provide feedback on the assessment procedures and filling the recording forms.
- Request each student to present his/her case to the group demonstrating their findings.
- Facilitate group discussion on the status of the child.
- Assign, if possible, other patients to be presented by other students if there is time to do so.
- Take note of the names of students who have already presented, so that in the next session the remaining students will have a chance of presenting.
- Wrap up the session showing that all learning objectives have been covered and highlighting the most important points that emerged from the discussion.

Part 2. Community medicine teaching sessions

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Community medicine/public health teaching programmes

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Community medicine/public health teaching programmes

Introduction

The learning objectives of IMCI teaching in community medicine/public health teaching programme(s), described in this section, focus mainly on the IMCI components related to health systems and community. Consequently, they aim to develop the following student competencies:

- Identify elements of the health system component.
- Recognize the role of IMCI in improving the quality of primary child health care services.
- List and describe key family practices related to child care and their impact on health.
- Describe and practise communication/counselling skills.
- Describe and apply data collection methods for key family practices related to child care at household level.
- Analyse information on key family practices related to child care.
- Identify determinants of key family practices related to child care.
- Formulate and prioritize messages to promote the key family practices.

Learning objectives depend on the design and duration of the teaching programme. This guide suggests that IMCI could be introduced into the following sessions/modules of community medicine/public health teaching programme(s), subject to adaptation by the different teaching institutions according to the design and duration of their community medicine/public health teaching programme(s).

1. **Introductory session/module:** students are oriented to:

a) **the health sector, placement of IMCI within the health system and different partners in health.**

This can be done through different approaches:

- a lecture by a member of the teaching staff or an experienced member of the Ministry of Health staff, presenting the organigram of the Ministry of Health in the country to describe the different sectors and programmes; highlighting the placement of child health related programmes and describing different elements of health system;
- assigning tasks to students at the beginning of their rotation within the community medicine/public health teaching programme(s), such as: a visit to the Ministry of Health to study its structure, particularly primary health care programmes and IMCI placement within this structure; presentation of the findings of the visit.

b) **IMCI community component and the key family practices related to child care:**

- a lecture by a teaching staff experienced in IMCI, presenting the IMCI community component, key family practices and cost-effective interventions to improve those practices;
- a lecture by a teaching staff on counselling skills, how to analyse the practice and how to formulate and prioritize the messages.

2. **Session/module on “community visits”:** students visit certain community structures such as the community leaders, council or committee, to identify the main community issues related to family child care practices and raise the awareness of the community about them.

3. **Session/module on “home visits” to practise:**

- data collection: each student is assigned a household and visits it to collect data on child care-related family practices and their determinants using a standard questionnaire;
- data analysis: students identify the performance of the key family practices related to child care and determinants;

- counselling skills: students counsel the mothers using the IMCI mother's card, based on the issues identified during the data analysis.

4. **Session/module on “Health facility visits”**: students are assigned to health facilities, assess IMCI-related health system elements, conduct caretaker interviews and counsel mothers.

Some teaching institutions may include many of the above activities in only one session/module.

Teaching methodology

Three types of sessions are proposed:

- A. Interactive combined theoretical and practical sessions
- B. Practical sessions
- C. Guided practice in the field

Knowledge and skills can be acquired through a combination of the above three teaching methodologies. There are different approaches for each teaching methodology with different outcomes. The selection of teaching approaches is strictly inter-related and complementary, with the aim of covering all the IMCI learning objectives of the teaching programme.

Note: The “approaches” for teaching IMCI described in the following sections can be used individually or combined in one or more teaching sessions, according to the situation and resources of each institution.

A. Interactive combined theoretical and practical sessions

These sessions include the following four sessions:

- Introduction to the IMCI strategy
- Introduction to IMCI community component
- Introduction to counselling
- Introduction to IMCI health system component.

A.1 Introduction to the IMCI strategy

This includes a general introduction to the IMCI strategy. It is the same introductory lecture given in paediatrics, followed by MCQs (see: Part 1. Paediatric teaching sessions: Sick child. A) Theoretical sessions, Approach 1: Introductory lecture). There should be an agreement between the paediatric department and community medicine/public health departments on the responsibility to deliver this session. Being an introduction, its timing should be before lectures on the IMCI specific components.

Aim

- To inform students about the IMCI strategy: definition, objectives, rationale, components and guidelines;
- To prepare students for the next IMCI teaching sessions in paediatrics and community medicine/public health.

Target

All students in the academic year either as one group in a plenary session or, preferably, divided into groups according to their rotation in the department.

Who gives the lecture

A senior paediatric/community medicine/public health teaching staff who is experienced in IMCI.

Expected duration

1–2 hours for the whole session (presentation, answering questions and discussion).

Learning objectives

By the end of the lecture, the students will be able to:

- Define the IMCI strategy.
- Define the rationale of the IMCI strategy.
- State the objectives of the IMCI strategy.
- Describe the three components of the IMCI strategy.
- Recognize the relationship between the different IMCI components.
- Identify where to use the IMCI guidelines.
- List the set of IMCI reference materials, e.g. chart booklet, wall charts, including the relevant sections in the paediatric department textbook if it exists.
- List the common child health problems addressed by the IMCI guidelines.

Teaching aids

- Equipment: laptop and data projector
- Content: IMCI e-lecture. This lecture is part of the regional IMCI pre-service education package. It should be reviewed and adapted based on the country situation as necessary.
- MCQs
or
- Equipment: overhead projector
- Content: presentation on transparencies, containing the same text of the lecture. It should be reviewed by the teaching staff to introduce the specific adaptations for the country, before it is produced as transparencies.
- MCQs

Procedures of the session

a) **Preparation for the session.** The lecturer should:

- Decide on the slides (e-lecture) or transparencies to be used during the session according to the specific learning objectives to be covered; introduce changes to reflect the country situation and ensure that those slides will be for a 15-minute presentation.
- Go through the selected slides or transparencies before the lecture and some related technical background for the discussion and questions; check that the audiovisual aids to be used during the session are functioning, including the CD/DVD with the adapted IMCI e-lecture.
- Prepare three MCQs or select them from the question bank (re: regional IMCI pre-service education package: IMCI pre-service education/question bank)

b) **Conduct of the session.** The lecturer will:

- start with short introductory statements and then present the slides or transparencies of the session.
- encourage an interactive approach during the lecture.
- make sure that the presentation does not take more than 15 minutes.
- If there is the possibility for the lecturer to work with small groups of students to have group discussions:
 - At the end of the presentation, give students three MCQs: one on the IMCI definition, one on the IMCI components and one on common child health problems addressed by IMCI.
 - Give them 10 minutes to answer the questions and then lead a discussion.
 - Present the correct answers at the end of the discussion.
- Wrap up the session emphasizing the following points:
 1. The IMCI strategy is primary child health care.
 2. IMCI is not a paediatric "subject". The IMCI guidelines provide an approach to managing children visiting primary health care facilities.
 3. IMCI can be regarded as implemented only if the three components are implemented. Those components are closely inter-related.
 4. The IMCI clinical guidelines are to be used at outpatient level for the outpatient management of children under 5 years, whether at outpatient departments of hospital, health centres or in the community.
 5. The lecturer may describe the importance of outpatient facilities as the first and subsequent encounter of children.

For IMCI teaching within the community medicine/public health curriculum, one introductory lecture for students is sufficient. This lecture is important as it paves the way to the teaching of the IMCI within community medicine/public health.

A.2 Introduction to IMCI community component

Aim

- To inform students about the IMCI key family practices related to child care, their prevalence, determinants and impact on child health in the country;
- To prepare students to formulate and communicate the messages addressing determinants of the key family practices related to child care;
- To prepare students for sessions with field practice.

Target

All students in the academic year either as one group in a plenary session or, preferably, divided into groups according to their rotation in the department.

Who gives the lecture

A senior community medicine teaching staff who is experienced in IMCI.

Teaching aids

- Equipment: laptop and data projector
- Content: IMCI e-lecture for community medicine teaching. This lecture is part of the regional IMCI pre-service education package specially prepared for the IMCI teaching within the community medicine/public health programme. It should be reviewed and adapted by the teaching staff prior to its utilization to introduce the specific adaptations for the country, as necessary.
- Five short case studies (see Annex 1).
or
- Equipment: overhead projector
- Content: presentation on transparencies, containing the same text of the lecture.

It should be reviewed by the teaching staff to introduce the specific adaptations for the country, before it is produced as transparencies.

- Five short case studies (see Annex 1).

Suggested duration of the session

2 hours

Learning objectives

By the end of the lecture, the students will be able to:

- Define the IMCI community component.
- Define the rationale of the IMCI community component.
- List the key child care family practices.
- Analyse the determinants of these practices.
- Describe the impact of the practice on child health.
- Select and formulate priority, specific and effective health education messages.

Procedures of the session

a) Preparation for the session. The lecturer should:

- Decide on the slides (e-lecture) or transparencies to be used during the session according to the specific learning objectives to be covered; introduce changes to reflect the country situation and ensure that those slides will be for a 15-minute presentation.
- Go through the selected slides or transparencies prior to the lecture and some related technical background for the discussion and questions.
- Check that the audiovisual aids to be used during the session are functioning, including the electronic CD/DVD with the adapted IMCI e-lecture.
- Prepare five short case studies that describe the main determinants of key child care family practices. Through these case studies, students are expected to analyse determinants of behaviour and formulate their priority messages for the family.

b) Conduct of the session. The lecturer will:

- Start with short introductory statements and then present the slides or transparencies of the session.
- Encourage an interactive approach during the lecture.
- Make sure that the presentation does not take more than 15 minutes.
- At the end of the presentation divide the students into 10 groups and distribute the case studies that have been prepared (every two groups will have the same case study).
- Explain that each group should analyse the behaviour, identify the main determinants of the practice(s), describe the possible impact of the behaviour on child health and formulate the relevant priority messages.
- Tell the students that five groups will be given the chance to present the result of the group work, as follows:
 - identification of the behaviour
 - identification of the main determinant of the behaviour
 - description of the possible impact on child health
 - formulation of the priority message to address the determinants of the behaviour.
- Give the students 30 minutes to work.
- Supervise students while they are working.
- Give them 10 minutes to prepare 10-minute presentations.
- Select five groups and ask them to present their work.
- Allow the group that worked on the same case study to provide additional points if any.
- Allow discussions of the group presentations by other students.
- Wrap up the session emphasizing the following points:
 1. The IMCI community component is a key component of IMCI.
 2. Investing in this component is crucial to reduce child mortality and promote health of children.
 3. Analysis of determinants of behaviours is essential to formulate adequate, key messages to address them.

A.3 Introduction to counselling

Aim

- To inform students of the definition of counselling;
- To demonstrate the counselling skills;
- To prepare students for the field practice.

Target

All students in the academic year either as one group in a plenary session or, preferably, divided into groups according to their rotation in the department.

Who gives the lecture

A senior community medicine/public health teaching staff.

Learning objectives

By the end of this session students will be able to:

- Describe the counselling skills:
 - non-verbal communication skills
 - listening
 - praising
 - asking questions
 - avoiding use of judging words
 - using simple language
 - providing relevant information
 - providing practical assistance
 - checking understanding

Teaching aids

- Equipment: laptop and data projector
- Content: Second IMCI e-lecture for community medicine/public health teaching. This lecture is part of the regional IMCI pre-service education package specially prepared for community medicine teaching. It should be reviewed and adapted based on the country situation as necessary.
- Role plays
or
- Equipment: overhead projector
- Content: presentation on transparencies containing the same text of the lecture. It should be reviewed by the teaching staff to introduce the specific adaptations for the country, before it is produced as transparencies.
- Role plays

Procedures of the session

a) **Preparation for the session.** The lecturer should:

- Decide on the slides (e-lecture) or transparencies to be used during the session according to the specific learning objectives to be covered and ensure that those slides will be for a 15-minute presentation.
- Go through the selected slides or transparencies before the lecture and some related technical background for the discussion and questions.

- Check that the audiovisual aids to be used during the session are functioning, including the CD/DVD with the adapted IMCI e-lecture.
- Refer to the regional training package on counselling on infant and young child feeding (Chapters 5 and 6 of the facilitator and participant modules) on how to demonstrate the counselling techniques (see Annex 1).
- Select the script of the role plays that will be used during the session from these chapters.
- Select two students to help in this demonstration and clearly explain to them what their role is.
- Select four students to conduct two role plays, one to demonstrate good counselling techniques and the other one inadequate counselling. Give them the scenarios (re: IMCI training material/Counsel the mother module, and the facilitator guide of the regional training material of infant and young child feeding). Go through the scenario and make sure they understand it. Provide them also with necessary supplies to conduct the role plays (doll, medicine, etc.).
- Prepare the flip chart and markers, and write two titles in two columns: “Good counselling techniques”, and “Bad counselling techniques”.

b) **Conduct of the session.** The lecturer will:

- Start with short introductory statements and then present the slides or transparencies of the session.
- Encourage an interactive approach during the lecture.
- Make sure that the presentation does not take more than 15 minutes.
- Ask the two students to help demonstrate the counselling skills (re: Chapter 5. Regional training material on counselling on infant and young child feeding). Follow the instructions in this chapter in demonstrating those skills involving the students actively to differentiate between good and bad skills.
- Ask the two students to conduct, in turn, the role plays at the end of the presentation.
- Conduct a group discussion on the good and bad counselling techniques at the end of each role play.
- Ask a student to go to the flip chart to tick under the relevant column every time his colleague mentions whether it is a good or bad technique.
- Wrap up the session emphasizing the following points:
 1. Counselling is one of the communication methods that helps mothers improve their knowledge and behaviour.
 2. Counselling skills are as important as clinical skills as much of child care is provided by child caregivers in the family. This means that a good physician should not only be a good clinician but also a good counsellor (effective communicator).

A.4 Introduction to the IMCI health system component

This session will explain the IMCI second component, its role in improving the quality of primary child health care and the link between the community and the health system.

Aim

- To inform students about the IMCI second component and its link to the community component;
- To inform students about the added value of the IMCI strategy in improving the quality of primary child health care services.

Target

All students in the academic year either as one group in a plenary session or, preferably, divided into groups according to their rotation in the department.

Who gives the lecture

A senior community medicine teaching staff.

Teaching aids

- Equipment: laptop and data projector
- Content: IMCI e-lecture for community medicine teaching included in the regional IMCI pre-service education package. It should be adapted and reviewed by the teaching staff prior to its utilization to introduce the specific adaptations for the country, if any.
- Three MCQs (see Annex 1).
or
- Equipment: overhead projector
- Content: presentation on transparencies. The transparencies contain the same text of the lecture. It should be reviewed by the teaching staff to introduce the specific adaptations for the country, before it is produced as transparencies.
- Three MCQs (see Annex 1).

Expected duration

2 hours

Learning objectives

By the end of the session, the students will be able to:

- List key elements of the health system.
- Describe each element and the role it plays in improving the quality of the services provided to children providing good service.
- Explain the link between the IMCI second and third components.

Procedures of the session

a) **Preparation for the session.** The lecturer should:

- Decide on the slides (e-lecture) or transparencies to be used during the session according to the specific learning objectives to be covered and ensure that those slides will be for a 15-minute presentation.
- Go through the selected slides or transparencies prior to the lecture and some related technical background for the discussion and questions.

- Check that the audiovisual aids to be used during the session are functioning, including the CD/DVD with the adapted IMCI e-lecture.
 - Prepare three MCQs on the IMCI second component (see Annex 1).
- b) **Conduct of the session.** The lecturer will:
- Start with short introductory statements and then present the slides or transparencies of the session.
 - Encourage an interactive approach during the lecture.
 - Make sure that the presentation would not take more than 15 minutes.
 - Work with small groups of students, if possible, to hold group discussions:
 - At the end of the presentation, distribute three MCQs to the students on:
 - definition of the IMCI second component
 - elements of the IMCI second component
 - criteria for good quality primary health care services of children.
 - Give the students 10 minutes to answer MCQs.
 - Discuss the answers, MCQ by MCQ, then provide the correct answer.
 - Wrap up the session emphasizing that: a functional health system is crucial for good quality primary health care services for children and to support community child care activities. Functional means that its key elements are in place and operational.



B. Practical sessions

Aim

- To further prepare students for supervised practice in the field;
- To strengthen students' counselling skills through close supervision.

Target

All students divided into groups according to their rotation in the department.

Who conducts these sessions

A community teaching staff experienced in IMCI.

Expected duration

Four practical sessions, 2 hours each, using a combination of the approaches described below.

Three approaches are suggested. A combination of two or more of these approaches is highly recommended to reinforce learning. The teaching department might allocate marks to students according to their performance during the practical sessions, where there are exercises to be answered.

Approach 1: Seminar prepared by the students

This approach should be used after the students have been exposed to IMCI theoretical sessions (lecture). This type of session will help strengthen self-learning, team work and presentation skills of students.

Learning objectives

By the end of the session, the students will be able to:

- Describe:
 - rationale of the IMCI strategy and its components
 - main child health problems in the country
 - IMCI second component (health system elements)
 - IMCI third component (improving key family practices related to child care)
 - health system in the country.
- List:
 - most important counselling techniques.
- Explain:
 - role of IMCI as a quality primary child health care strategy in improving primary child health care services
 - link between the three IMCI components
 - importance of counselling in improving child health
 - most important determinants of key family child care-related practices in the country.

Teaching aids

- Equipment: laptop and data projector
- Content: IMCI e-seminar prepared by the students.
or
- Equipment: overhead projector
- Content: seminar on transparencies.

Procedures of the session

a) **Preparation for the session.** The teacher should:

- Divide the students into groups, the size of which depends on the number of students per rotation in each teaching unit; the higher the number of groups, the smaller the number of students per group and the higher the chances of every student contributing to the seminar.
- Assign one topic to each group.
- Assign time for the preparation of the seminar by each group of students.
- Prepare and provide students with a list of reference materials as resources to prepare their presentation for the seminar, such as:
 - IMCI training modules
 - IMCI students' notes
 - IMCI reference materials: *Improving family and community practices: a component of the IMCI strategy* (WHO/CAH/98.2); *Family and community practices that promote child survival, growth and development: a review of the evidence*; WHO IMCI reference materials on CD.
- Decide on the number of slides or transparencies per topic.
- Assist and supervise students during their preparatory work for the seminar.
- Assist students to check the audiovisual aids before the seminar.
- Prepare a set of questions relevant to each topic for group discussion.

b) **Conduct of the session.** The teacher will:

- Start with short introductory statements, highlighting the objectives of the seminar.
- Ask each group of students to present their assignments in turn.
- Lead a short discussion, after the presentation of each group using the set of questions prepared in advance.
- Carry out a competition game:
 - Divide the students into two groups and give 10 minutes to each group to prepare questions on the presentations made, to be asked of the other group.
 - Invite them to ask the questions to the other group.
 - Moderate the discussion, comment on the relevance of the questions and on the answers, complementing them as necessary, and summarize the key points after each answer.
 - Keep track on a board of the scores of each group and congratulate the winning team.
- Wrap up the session, emphasizing that: the IMCI second and third components are major approaches for the implementation and sustainability of IMCI.

Approach 2: Role play (demonstration and practice of skills) using communication techniques for counselling mothers

Learning objectives

By the end of the session, the students will be able to:

- List and describe the counselling skills¹
 - non-verbal communication skills
 - listening
 - praising
 - asking questions
 - avoiding use of judging words
 - using simple language

¹ These are the core counselling skills; others can be added subject to availability of time and as long as the students can practise them.

- providing relevant information
- providing practical assistance
- checking understanding.
- Apply the counselling techniques to counsel the mother on the key family practices related to child care.

If the community medicine/public health teaching programme comes after the exposure of students to IMCI teaching in paediatrics, the following learning objective might be added:

- By the end of the session, the students will be able to apply the communication techniques to counsel the mother on:
 - when to come back immediately
 - how to administer medicines
 - home care (including feeding practices)
 - referral
 - when to return for a follow-up visit.

Teaching aids

- Background stories for the role plays (see Annex 1)
- Instructions with roles of mothers and health care providers
- Supplies required for role plays, such as doll, cups and spoons and medicines.

Procedures of the session

a) **Preparation for the session.** The teacher will:

- Prepare a script for a role play to be conducted by her/him with a student to demonstrate good counselling techniques.
- Check the supplies required to conduct the role play.
- Prepare the scripts for the other three role plays and roles of mothers and health care providers to be performed by the students from the module “Counsel the mother” or the facilitator guide of the regional training materials on “Counselling on infant and young child feeding”.

b) **Conduct of the session.** The teacher will:

- Start with a review of the counselling techniques.
- Demonstrate good counselling techniques through a role play.
- Explain the objectives of the role plays to the students.
- Assign three role plays to three pairs of students and explain how to conduct the role play, giving them 5 minutes to prepare and 10 minutes to perform each role play.
- Ask the students to follow each role play and write down which counselling techniques were used correctly and which ones were missed or used incorrectly and whether they felt that the caretaker had correct knowledge about the advice received.
- Ask the students to start the first role-play, and be ready to stop after 10 minutes.
- Lead a group discussion, at the end of the first role play, on the communication techniques used correctly and those missed or incorrectly used, asking students about their impressions of whether the caretaker was able to know the advice received, and about their overall impression on the quality of counselling provided by the health care provider.
- Select two different students to perform the second role play and then another two students for the third role play, following the same procedure as for the first role play.
- Wrap up the session, highlighting the most important points that have emerged during the group discussions.

Approach 3: Case scenario

Learning objectives

By the end of the session, the students will be able to apply their knowledge of the IMCI second and third components to case studies. Some of the case scenarios can be administered at the end of the session as part of the students' formative assessment, scoring their answers. Teaching departments should indicate marks to be given to those sessions accordingly. Remember that the main aim is not to examine students but rather to reinforce learning by providing feedback.

Teaching aids

- Set of 5 case scenarios. Source: IMCI training modules, facilitator guide and participant module of the regional training package on “Counselling on infant and young child feeding” (Annex 1).
- Copy of each case scenario for each student.
- Equipment: lap top and projector, or overhead projector and transparencies (for demonstration and group feedback).

Procedures of the session

a) **Preparation for the session.** The teacher will:

- Prepare a set of five case scenarios ensuring that the content is consistent with the IMCI teaching conducted so far.
- Prepare enough copies of each case scenario to be distributed to the students.
- Select an example of a case scenario to demonstrate on a screen how to solve it.

b) **Conduct of the session.** The teacher will:

- Start with a short description of the objectives of the session and the difference between the types of questions included in each case scenario.
- Demonstrate how to solve a case scenario, using the available audiovisual equipment, followed by a group discussion with the students.
- Distribute the set of four remaining case scenarios to the students.
- Ask the students to read the first case scenario carefully and answer the questions within a given time.
- Review each question of the first case scenario with them as a group discussion, immediately after they have completed it and the time allocated has expired.
- Ask the students to complete the second case scenario and then review it with them as with the first one; repeat the process with the third case scenario.
- Ask the students to complete the fourth case scenario within a given time, explaining that their answers to this last case scenario will be scored and used as part of their formative assessment.
- Collect the fourth case scenario from each of the students as they complete them or when the time has expired.
- Review each question with them as a group discussion.
- Wrap up the session highlighting the most important points that emerged during the group discussion.

Approach 4: Drills

The lecturer can start the practical session by conducting a drill of 10 minutes. Drills are applied only if the group is small in number.

Learning objectives

To review and reinforce knowledge learnt during previous sessions.

Expected duration

10 minutes at the beginning of any practical session.

Teaching aids

A list of questions for the drill. This list should cover the health system component and community component including key family practices and counselling skills. The lecturer will select questions related to topics already given to the students (Annex 1).

Procedures of the session

a) **Preparation for the session.** The lecturer should:

- Prepare a list of relevant short questions and answers to be ready for the session.

b) **Conduct of the session.** The lecturer will:

- Gather the students together and tell them s/he will conduct a drill.
- Explain the procedures for a drill:
 - The drill is not a test. It is an opportunity for them to practice recalling information.
 - S/he will call on individual students in order, one at a time, to answer the questions. If a student cannot answer, or answers incorrectly, go to the next and ask the question again.
 - Students should wait to be called on and should be prepared to answer as quickly as they can. This will help keep the drill lively.
- Ask if students have any questions about the drill.
- Explain the topics they will address during the drill.
- Start the drill by asking the first question. Call on a particular student to provide the answer. S/he should answer as quickly as he can. Then ask the next question and call on another student to answer. If a student gives an incorrect answer, ask the next student if s/he can answer.
- Keep the drill moving at a rapid pace.
- Finish the drill when all students have had an opportunity to answer and when s/he feel the students are answering with confidence.

Approach 5: Analysis skills lab

Learning objectives

By the end of this session, the students will be able to:

- Explain the items of the questionnaire designed to collect data at the community and/or household levels.
- Analyse and interpret the data collected.
- Summarize the findings.

Teaching aids

- Equipment: laptop and data projector
- Content:
 - Questionnaire for data collection at the community, or household level
 - Two pre-filled questionnaires for data collection at the community or household level: one for demonstration and one for practice.
- or
- Equipment: overhead projector
- Content:
 - Questionnaire for data collection at the community or household level on transparencies
 - Two pre-filled questionnaires for data collection at the community or household level: one for demonstration and one for practice.

Procedures of the session

a) **Preparation for the session.** The lecturer should:

- Develop the questionnaire for data collection at the community and household level.
- Fill in two questionnaires for data collection at the community or household level: one for demonstration and one for practice.
- Make enough copies of the questionnaire for practice.

b) **Conduct of the session.** The lecturer will:

- Introduce the objectives of the session.
- Introduce the questionnaire explaining item by item.
- Present the example of the completed questionnaire.
- Explain how to analyse and interpret the data.
- Demonstrate how to summarize the findings.
- Divide the students into small groups.
- Distribute the filled in practice questionnaire.
- Tell the students to study the questionnaire given to them and follow the same procedure in analysing and interpreting the data, and summarize the findings by group.
- Allow 15 minutes for the group work.
- Hold a group discussion and, item by item, ask each group to provide input.
- Wrap up the session by highlighting the importance of a good analysis to guide the use of data for action and the formulation of messages to improve the child care practices.



C. Supervised practice in the field

Aim

- To enable students to acquire skills for all tasks related to the IMCI second and third components according to the community medicine/public health teaching programme(s), including data collection and analysis of key family practices, identifying the determinants of those practices, formulation of the messages, educating¹ the community and counselling the family accordingly.

Practice is an opportunity to integrate knowledge, skills and attitudes. Therefore the teacher guidance and close supervision, particularly in the first field sessions, is crucial to support students to acquire adequate skills and build self confidence. This session should be conducted after the students have had the related interactive combined theoretical and practical session.

This practice can include:

1. Community field visits
2. Home visits
3. Health facility visits

Students need:

- enough time to practise these skills
- clear instructions on the visit procedures
- supportive supervision by the teaching staff during their practice.

According to the time allocated to field practice, one or more of the options described below can be selected.

Target

All students in the academic year divided into groups according to their rotation in the department.

Who conducts these sessions

A teaching staff experienced in IMCI.

Expected duration

The total number of sessions depends on the total duration of the community medicine/public health rotation and the time allocated to the field practice sessions. A minimum of six sessions (3 hours each) is recommended for community, home and health facility visits.

1. Community field visits

There should be at least two visits to the community to meet with community leaders, and existing community-based structures. During the first one, students will be collecting data. This will be followed by team work to analyse the data and identify determinants and agree on the key messages. During the subsequent visit(s), students will practice educating and raising the awareness of the community about the good practices related to child care. At the end of the two visits, the students will present their work through an exhibition-like activity.

² Students will use the skills of health education, taught in other sessions of community medicine/public health programme(s).

Learning objectives

By the end of the field practice sessions, the students will be able to:

- Collect information on the key family practices on child care in the community.
- Analyse the situation of these practices in the community and identify their main determinants.
- Develop and prioritize key health communication messages to address the identified determinants.
- Educate the community on correct practices.
- Brief the community on the results of the visits.

Teaching aids

- Equipment: laptop and data projector
- Content:
 - questionnaire for data collection at the community on practices related to child health.
 - guidelines to standardize procedures for the visit
 - checklist to monitor students' practice
 or
- Equipment: overhead projector
- Content:
 - questionnaire for data collection at the community level on practices related to child health, on transparencies
 - guidelines to standardize procedures of the visit, on transparencies
 - checklist to monitor students' practice.

Procedures of the sessions

a) **Preparation for the sessions.** The teacher should:

- Prepare the guidelines on standard procedures to be followed during the field practice, to be explained in detail to the students, and make copies for each student.
- Divide students into groups and assign each group to a community; each group will be accompanied by a teaching staff to provide guidance and close supervision.
- Identify community leaders in each community to which the students are assigned.
- Review and prepare enough copies of the data collection questionnaire on community practices on child care.
- Prepare a few examples for practising how to fill in the questionnaire.
- Meet with the community leaders to inform them about the field visits and their objectives and obtain their consent and support; explain also that the students will be collecting information on child care practices.
- Review the proposed learning objectives of each session and modify them according to the country specific adaptation.
- Identify the site where to meet with community leaders.
- Identify the site to present the results of field visits.

b) **Conduct of the session**

First field visit to the community

Before this field visit, the teacher will:

- Review quickly with the students the questionnaire to be used for data collection during the visit.
- Explain the standard procedures for the field visit.

- Distribute copies of the questionnaire and standard procedures for field visit.
- Discuss with the students their meeting with the community leaders and how they will orient them on the objectives of the visit.

During the field visit, the teacher will:

- Introduce the students to the community leaders.
- Ask the students to talk to the community leaders under his supervision.
- Supervise them while they are using the data collection tool.
- Assess them through the monitoring checklist.

After the field visit, the teacher will:

- Review the completed questionnaires.
- Review with the students the principles of effective communication that they practised.
- Discuss remarks on their performance.
- Give the students the following assignments:
 - analysis of the collected data
 - preparatory work for the exhibition.

Second field visit to the community

This visit comprises two activities: 1) classroom preparatory work; 2) field visit. Before the second field visit, the teacher should conduct classroom preparatory work as follows.

- Review with each group of students the work they have done after the first field visit, i.e. analysis of data, selection and formulation of key messages.
- Review with the students the materials they have prepared for the exhibition-like activity (photos with commentaries, posters, presentations, etc).
- Review the procedures of the field visit.
- Guide and supervise them while preparing the site for exhibition.

During the field visit, the teacher will:

- Make sure that the students communicate and deliver the correct messages following the principles of effective communication.
- Make sure that the students are running the exhibition effectively.

After the field visit:

- Discuss with the students their performance.
- Comment on the different methods used during the exhibition.
- Assign marks (students' assessment) according to their performance.

2. Home visit

Learning objectives

By the end of the visits, the students will be able to:

- Collect information on the key family practices related to child care from families in the homes visited.
- Analyse the situation with regard to the key family practices into their determinants.
- Develop and prioritize the key messages to address the determinants identified.
- Counsel the family on correct messages.

Teaching aids

- Equipment: laptop and data projector
- Content:
 - questionnaire for data collection at the household level on practices related to child health
 - guidelines to standardize procedures for the visit
 - checklist to monitor students' practice
 - IMCI mother's cards.
- or
- Equipment: overhead projector
- Content:
 - questionnaire for data collection at the household level on practices related to child health, on transparencies
 - guidelines to standardize procedures of the visit, on transparencies
 - checklist to monitor students' practice
 - IMCI mother's cards.

Procedures of the sessions

a) Preparation for the sessions. The teacher should:

- Agree with the community on the home visits of students.
- Divide students into groups and assign each group to households.
- Prepare enough copies of the questionnaire on the family practices.
- Prepare enough copies of the guidelines for the standard procedures of the home visit.
- Prepare the checklist to monitor students' practice.

b) Conduct of the session

First home visit

Before the home visit, the teacher will:

- Review quickly with the students the questionnaire to be used for data collection during the visit.
- Explain the standard procedures for the field visit.
- Distribute copies of the questionnaire and standard procedures for field visit.
- Discuss with the students their visit to households and how they will explain to families the objectives of the visit.

During the first home visit, the teacher will:

- Supervise the students while they communicate with the mothers and family members using the monitoring checklist.
- Make sure that the students communicate the correct messages in a correct way to the family members.
- Assess the students' performance using the monitoring checklist.

After the first home visit, the teacher will:

- Review the completed questionnaires.
- Review with the students the principles of effective communication that they practised.
- Discuss remarks on their performance.
- Give the students the assignment on analysis of the collected data.

Second home visit

This visit comprises two activities: 1) classroom preparatory work; 2) home visit. Before the second home visit, the teacher should conduct classroom preparatory work as follows.

- Review with each group of students the work they did after the first home visit, i.e. analysis of data, selection and formulation of key messages.
- Review the procedures of the home visit.

During the home visit, the teacher will:

- Make sure that the students communicate and deliver the correct messages following good counselling skills.

After the home visit:

- Discuss with the students their performance.
- Comment on the different methods used during exhibition.
- Assign marks (students' assessment) according to their performance.

3. Visit to a model IMCI-implementing primary health care facility

Learning objectives

By the end of the visit, the students will be able to:

- Describe the main child health-related activities conducted at a primary health care facility³:
 - Immunization: cold chain, vaccine administration, vaccination recording;
 - Growth monitoring: weighing of children, growth chart, plotting weight on the growth chart;
 - Care for a sick child following the IMCI protocol: case management, counselling, recording information.
- Recognize selected supportive elements of the health system at primary care level:
 - patient flow at the health facilities
 - distribution of tasks between the different health care providers
 - organization of work related to IMCI
 - health information system: tools, quality of filling in the tools
 - medicines management: quantification, order, delivery.

If these learning objectives cannot be covered in just one visit, allow for a second visit to complete all the tasks.

Teaching aids

- Equipment: laptop and data projector
- Content:
 - questionnaire for data collection on child health services at a primary health care facility
 - guidelines to standardize procedures for the visit
 - checklist to monitor students' practice.
 or
- Equipment: overhead projector
- Content:
 - questionnaire for data collection on child health services at a primary health care facility
 - guidelines to standardize procedures of the visit, on transparencies
 - checklist to monitor students' practice.

³ This list should be adapted according to the health services provided to children at primary health care facilities in the country.

Procedures of the sessions

a) Preparation for the sessions. The teacher will:

- Make arrangements with the primary health care facilities and relevant officials for the visits.
- Plan to have at least one visit at a time when an immunization session is scheduled at the health facility.
- Divide the students into groups and assign each group to a primary health care facility.
- Prepare the questionnaire on the “visit to a primary health care facility” and make enough copies of it.
- Prepare the guidelines on the standard procedures of the visit to a primary health care facility and make enough copies of it.

b) Conduct of the session

Before the field visits, the teacher will:

- Review quickly with the students the questionnaire to be used for data collection during the visit.
- Explain the standard procedures for the field visit.
- Distribute copies of the questionnaire and standard procedures for field visit.
- Discuss with the students their visit to the primary health care facility.
- Prepare MCQs on health system elements and different services delivered at the primary health care facility.

During the field visits, the teacher will:

- Introduce the students to the health care providers.
- Supervise the students while they perform their tasks.

After the health facility visits, the teacher will:

- Review the completed questionnaires.
- Distribute to the students the MCQs related to their visit, on different services and health system elements, and assign marks accordingly (part of students' assessment).



Medical and allied health professional schools play a key role in preparing the future cadres of health providers who will be providing child health care services in a country, whether in the public or private sector. Medical schools in the WHO Eastern Mediterranean Region have been taking steps in recent years to introduce the Integrated Management of Child Health (IMCI) approach into their undergraduate teaching programmes, in collaboration with the Regional Office for the Eastern Mediterranean. This IMCI pre-service education package proposes a standard approach to each phase, to assist teaching institutions in introducing, implementing and assessing undergraduate teaching programmes including IMCI.

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