Introduction to a New Online Smart digital Integrated Management of Childhood Illness (Smart dIMCI) course

May 16, 2024

Co-hosted by WHO and the Digital Health and Innovations subgro
of the Child Health Task Force

Smart Digital Integrated Management of Childhood Illness (#Smart dIMCI) Course

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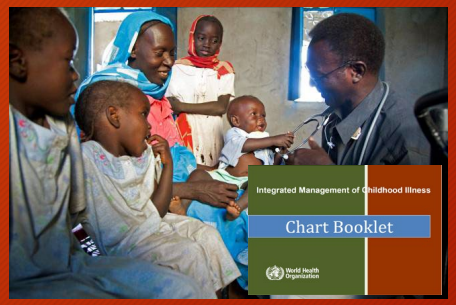
World Health Organization

What is the problem with the management of sick children?

- Millions of sick children are seen at primary health care facilities
- Over 5 million of these children still die every year
- Over 50% these deaths are attributable to poor quality of care

Home/Community

1st level facility



Hospital

Number of Children Seen

Syndromic approach

Specialized care

Case management skills, diagnostics and supplies

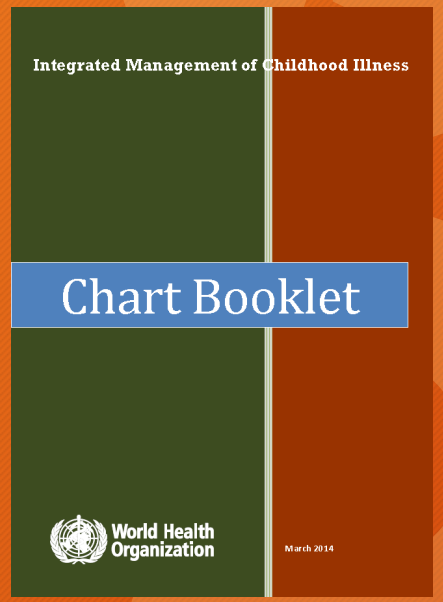
What is Integrated Management of Childhood Illness (IMCI) Strategy?

- A strategy developed in the 1990s by WHO and UNICEF with the primary objective of contributing to the **reduction of under five childhood mortality**

- Purpose:
  1. To improve quality of care by improving case management skills of health workers
  2. Strengthening health system support
  3. Improving knowledge, skills and practices of caregivers

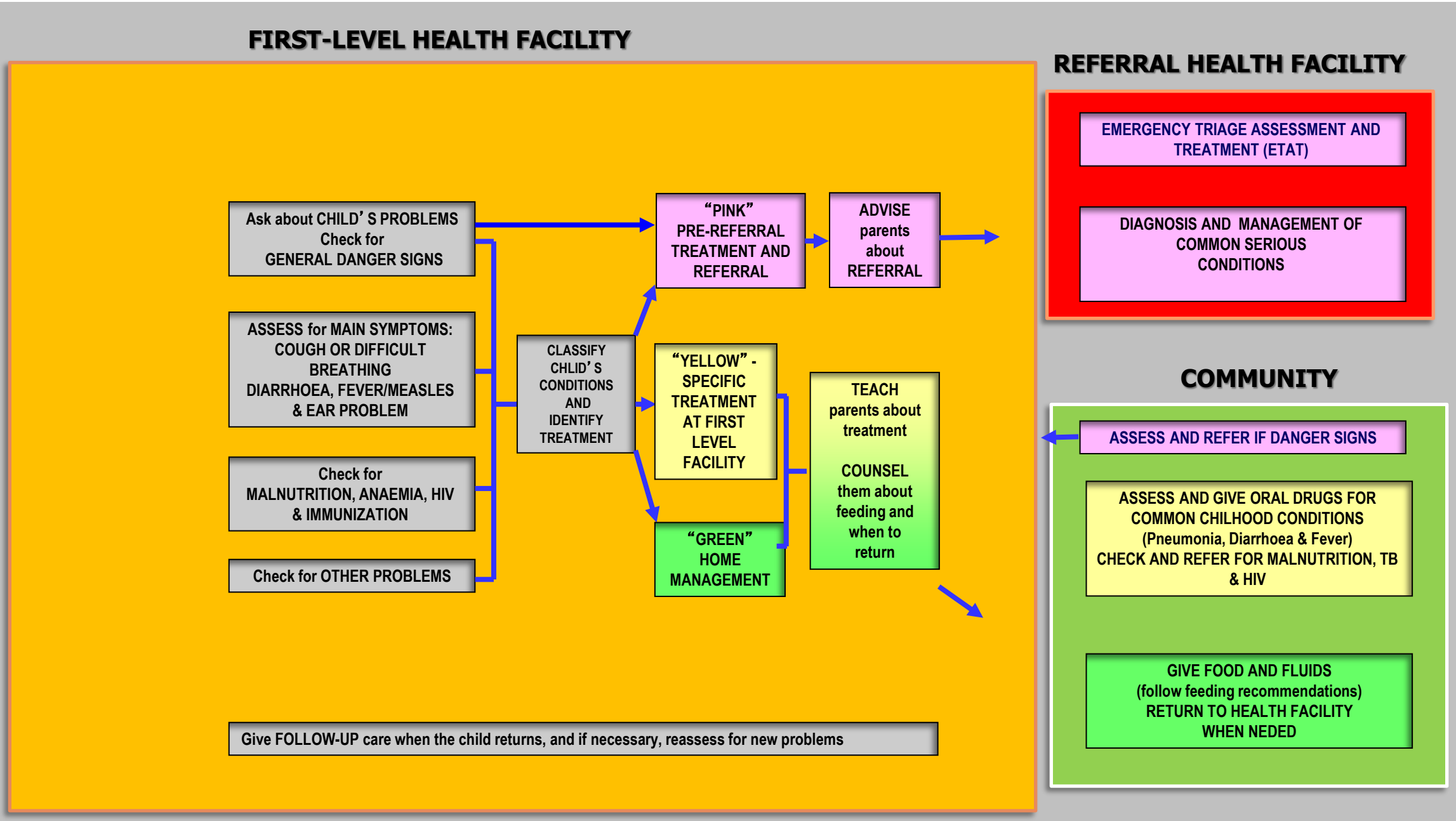
- How does IMCI improve quality of care?
  - By training primary healthcare workers in the use of evidence-based algorithms in the management of common childhood illnesses.

What are the core principles of IMCI case management?



- Child centered care with focus on both the disease and the health of the child.
- Most sick children present with overlap of signs and symptoms.
- Few simple clinical signs for action-oriented classifications rather than exact diagnosis
- Empirical treatment to cover the most likely diseases for each classification.
- Counseling for home care
- Disease prevention, and promotion of health growth and development.

IMCI case management approach



Cough or difficult breathing

THEN ASK ABOUT MAIN SYMPTOMS:

Does the child have cough or difficult breathing?

IF YES, ASK:

- For how long?

LOOK, LISTEN, AND FEEL*. (CHILD MUST BE CALM)

- Count the breaths in one minute.
- Look for chest indrawing.
- Look and listen for stridor.
- Look and listen for wheezing.

If wheezing with either fast breathing or chest indrawing:
Give a trial of rapid acting inhaled bronchodilator for up to three times 15-20 minutes apart. Count the breaths and look for chest indrawing again, and then classify.

If the child is:	Fast breathing is:
2 months up to 12 months	**50** breaths per minute or more
12 months up to 5 years	**40** breaths per minute or more

Classify COUGH or DIFFICULT BREATHING

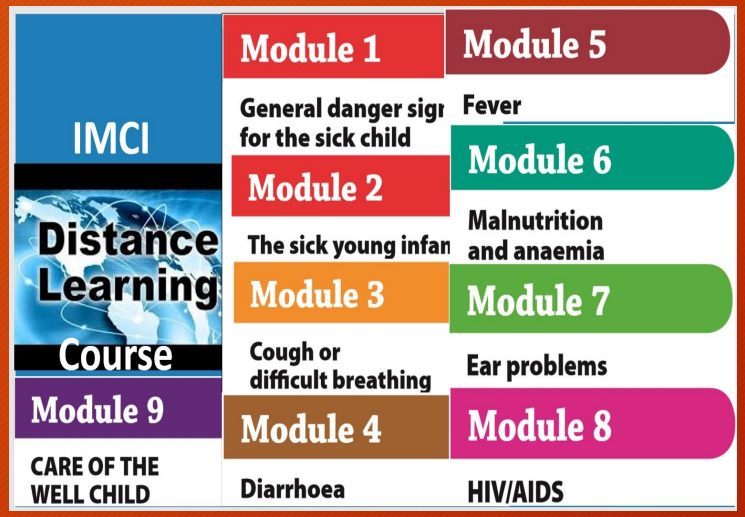
SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign or • Stridor in calm child	**SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	➢ **Give first dose of an appropriate antibiotic** ➢ **Refer URGENTLY to hospital ****
• Chest Indrawing or • Fast breathing	**PNEUMONIA**	➢ **Give oral Amoxicillin for 5 days ***** ➢ If wheezing (or disappeared after rapidly acting bronchodilator) give an inhaled bronchodilator for five days **** ➢ If chest indrawing in HIV exposed/infected child, give first dose of amoxicillin and refer ➢ Soothe the throat and relieve the cough with a safe remedy ➢ If coughing for more than 14 days or recurrent wheeze, refer for possible TB or asthma assessment ➢ Advise the mother when to return immediately ➢ Follow-up in 3 days
• No signs of pneumonia or very severe disease	**COUGH OR COLD**	➢ If wheezing (even if it disappeared after rapidly acting bronchodilator) give an inhaled bronchodilator for 5 days**** ➢ Soothe the throat and relieve cough with a safe remedy ➢ If coughing for more than 14 days or recurrent wheezing, refer for possible TB or asthma assessment ➢ Advise mother when to return immediately ➢ Follow up in 5 days if not improving

**If pulse oximeter is available, determine oxygen saturation and refer if < 90%.*
*** If referral is not possible, manage the child as described in the pneumonia section of the national referral guidelines or in WHO Pocket Book for hospital care for children.*
****Oral Amoxicillin for 3 days could be used in patients with fast breathing but no chest indrawing in low HIV settings.*
***** In settings where inhaled bronchodilator is not available, oral salbutamol may be tried but not recommended for treatment of severe acute wheeze.*

What are the IMCI Training options?

1. Facilitated classroom paper based training course

2. Paper based distance IMCI learning course



3. # Smart digital IMCI self-learning course

#Smart dIMCI Self-Learning Course

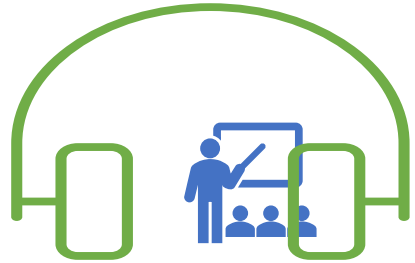
A digital IMCI learning course available on the WHO Academy Platform

Enroll here

Why #SMART dIMCI Course?

To facilitate rapid dissemination and access to evidence-based guidelines for continuing professional development

To increase accessibility through digital platforms - laptops, smart phones or tablets.



To improve learning experience and motivation for self-learning:

Smart use of interactive multimedia and other elements to enhance learning.

Tools to foster participatory learning and virtual discussions with trainees and mentors.

Our mission

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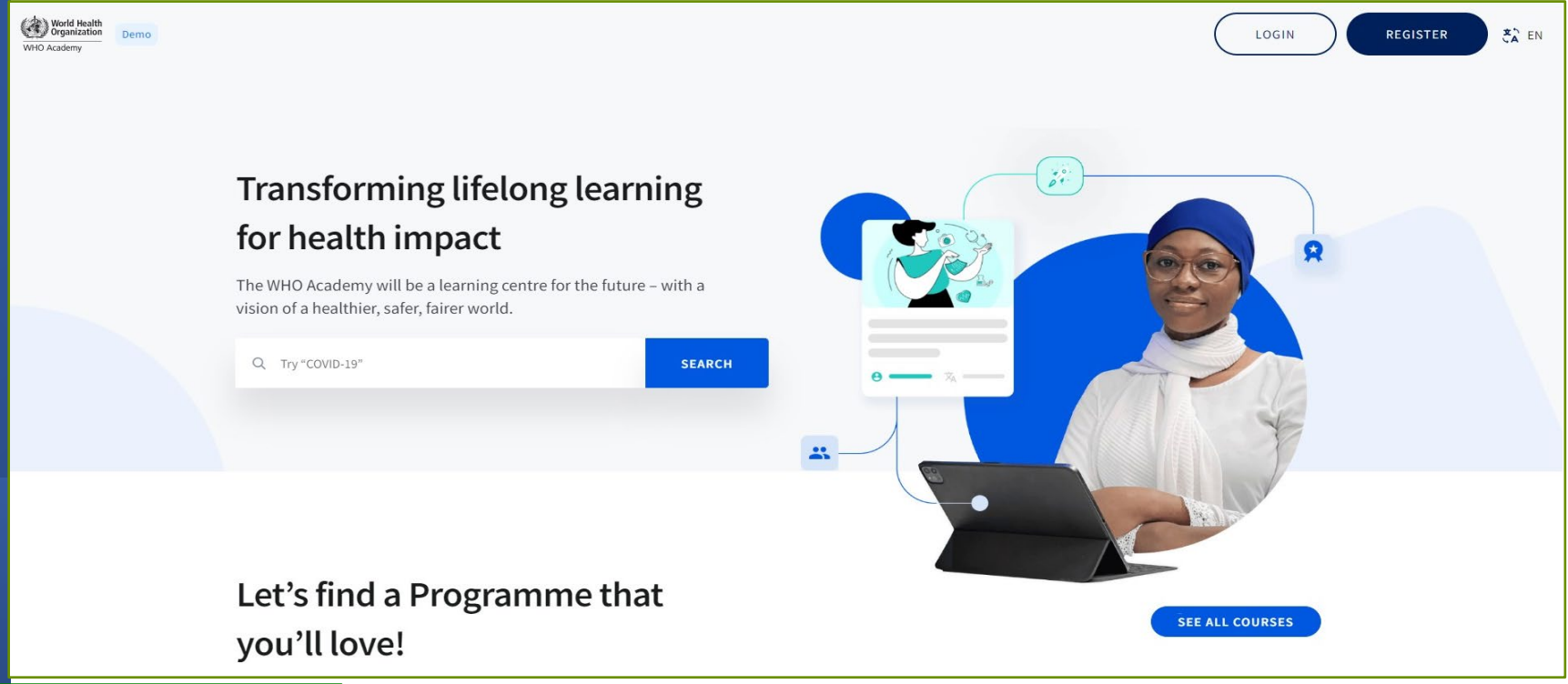
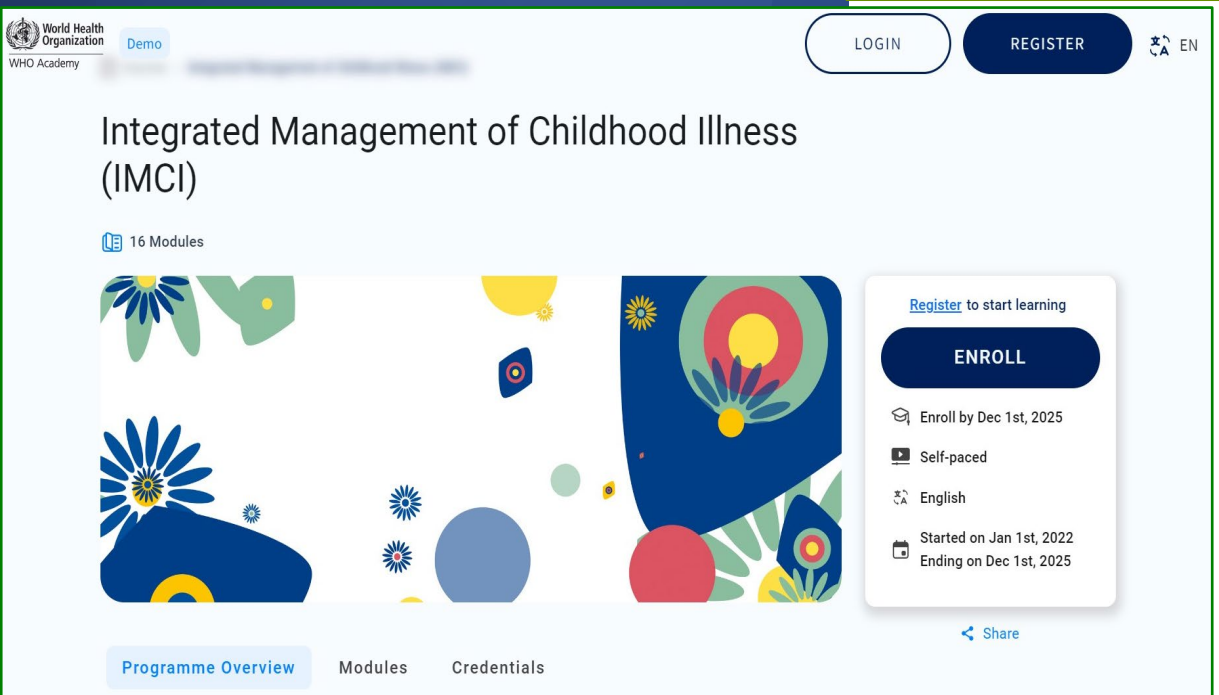
Strengthen, empower and improve performance of all primary healthcare workers managing sick young infants and children.

Who are the target audience and where?

How to access the course



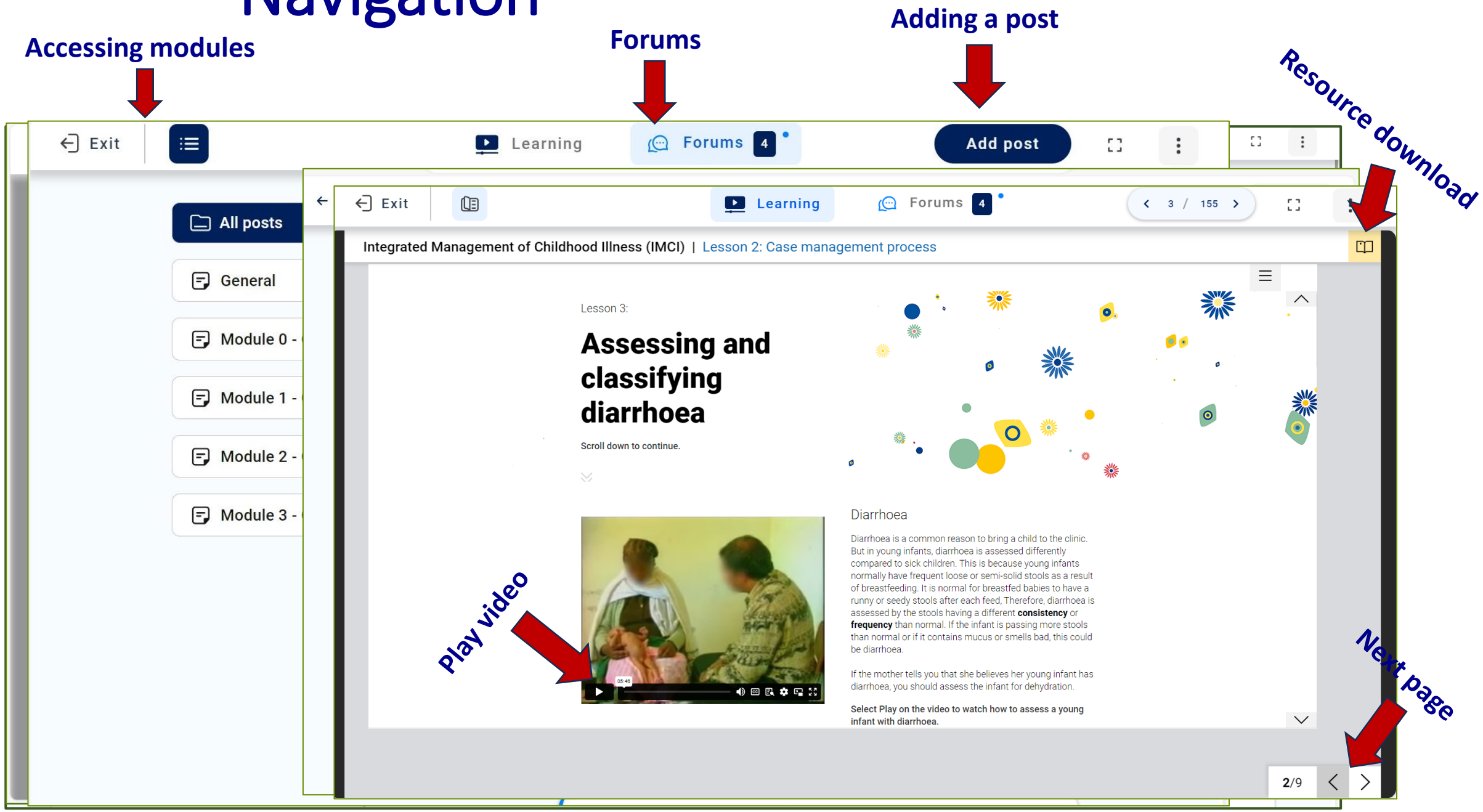


Go to the WHO Academy platform and register

https://web-staging.lxp.academy.who.int/

Enroll here

Navigation


Accessing modules
Forums
Adding a post
Resource download
Exit
Learning
Forums 4
Add post
All posts
General
Module 0 -
Module 1 -
Module 2 -
Module 3 -
Exit
Learning
Forums 4
3 / 155
Integrated Management of Childhood Illness (IMCI) | Lesson 2: Case management process
Lesson 3:
Assessing and classifying diarrhoea
Scroll down to continue.
Diarrhoea
Diarrhoea is a common reason to bring a child to the clinic. But in young infants, diarrhoea is assessed differently compared to sick children. This is because young infants normally have frequent loose or semi-solid stools as a result of breastfeeding. It is normal for breastfed babies to have a runny or seedy stools after each feed, Therefore, diarrhoea is assessed by the stools having a different consistency or frequency than normal. If the infant is passing more stools than normal or if it contains mucus or smells bad, this could be diarrhoea.
If the mother tells you that she believes her young infant has diarrhoea, you should assess the infant for dehydration.
Select Play on the video to watch how to assess a young infant with diarrhoea.
Play video
Next page
2/9

#Smart dIMCI Course: Approach to learning

1

READ

Using smart tools for improved learning experience

2

SEE

3

PRACTICE

4

TEST

#Smart dIMCI Course Organization

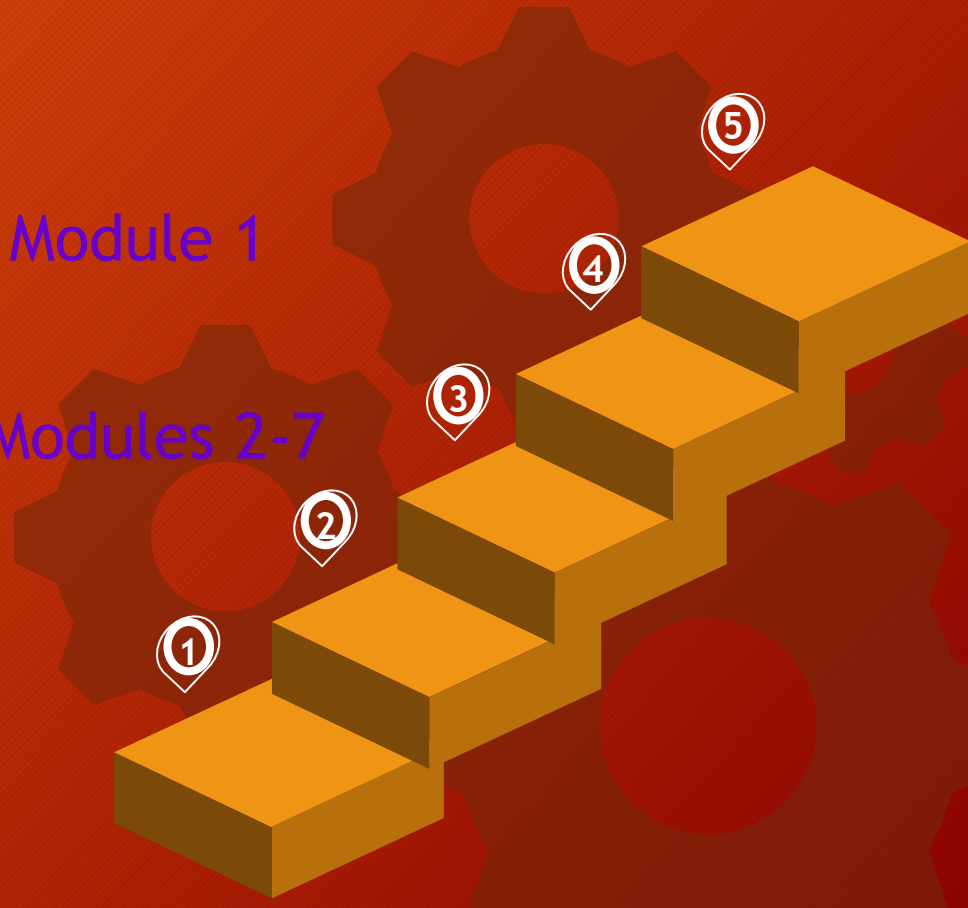
1. Introduction to IMCI - Compulsory

2. Sick Young Infant aged 0 up to 2 months- Module 1

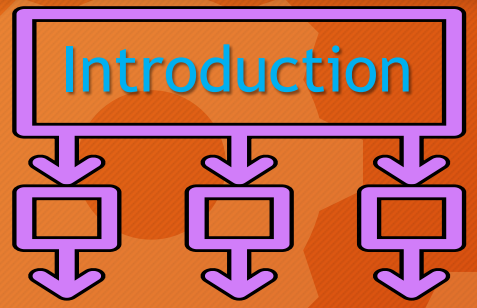
3. Sick child aged 2 months up to 5 years – Modules 2-7

4. Child with HIV/AIDS – Module 8

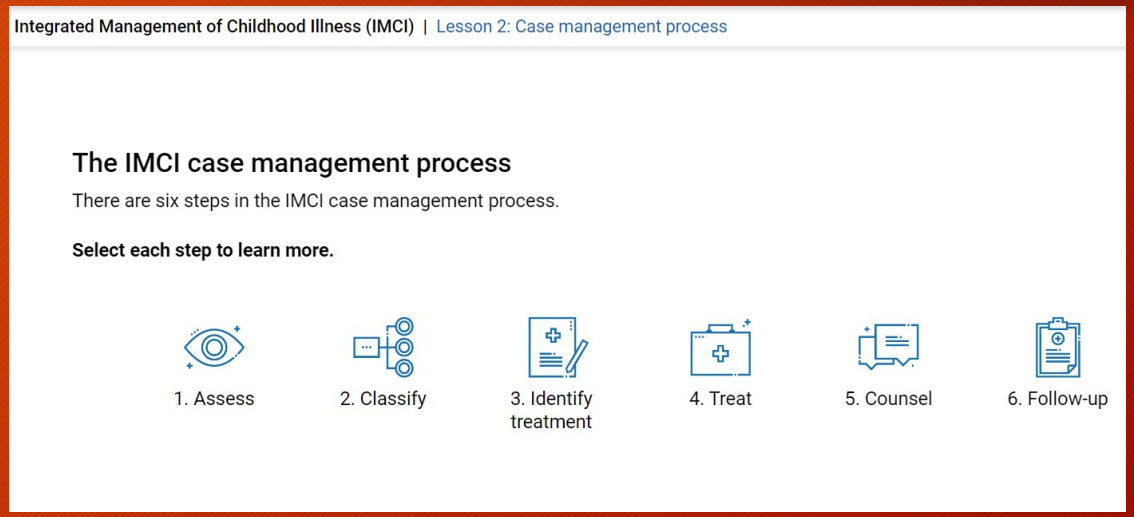
5. Care for the well child – Module 9

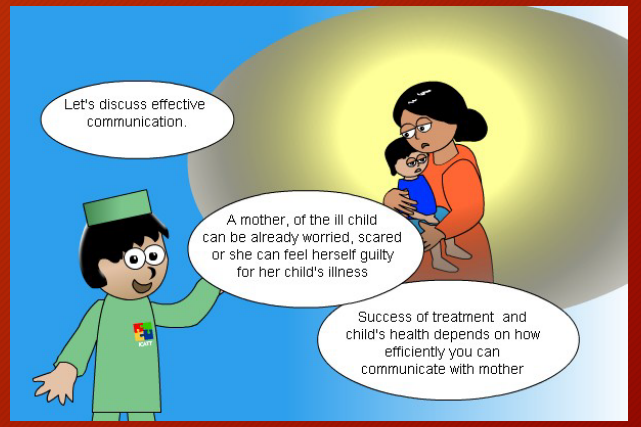


Section 1: INTRODUCTION TO IMCI CASE MANAGEMENT PROCESS



- Lesson 1: What is IMCI?
- Lesson 2: IMCI case management process
- Lesson 3: Assess and classify
- Lesson 4: Identify treatment and treat
- Lesson 5: Counsel the caregiver
- Lesson 6: Follow up care
- Lesson 7: Practice your skills

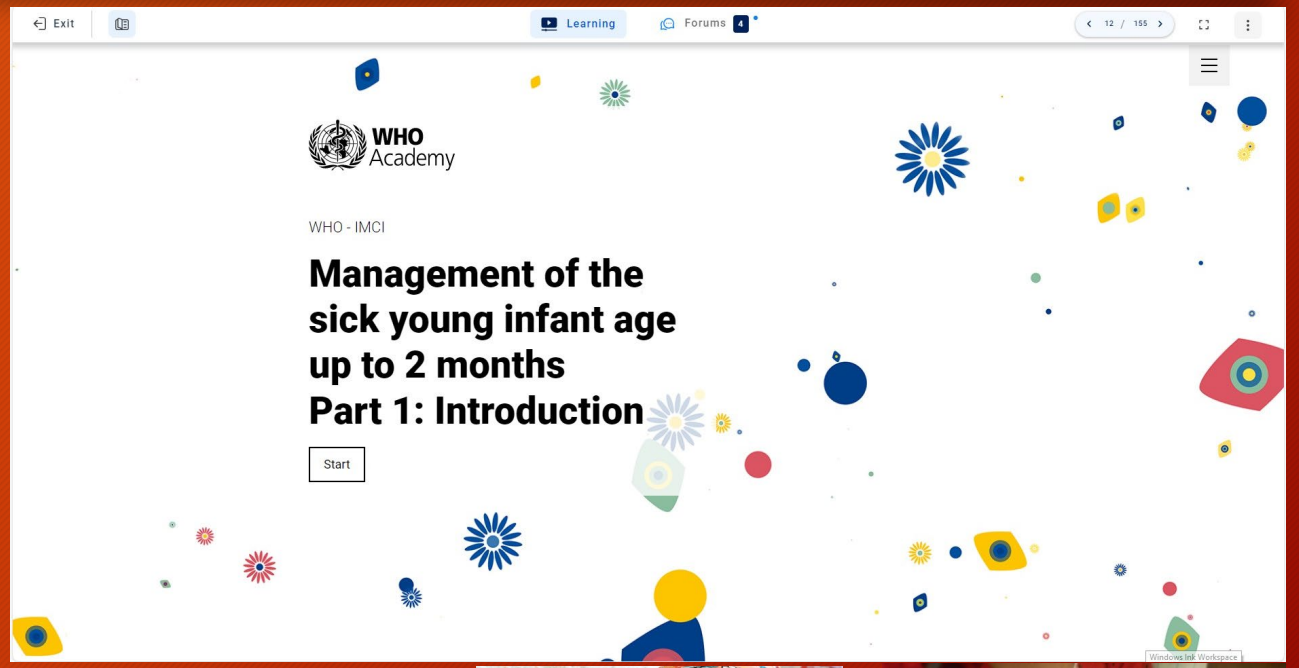


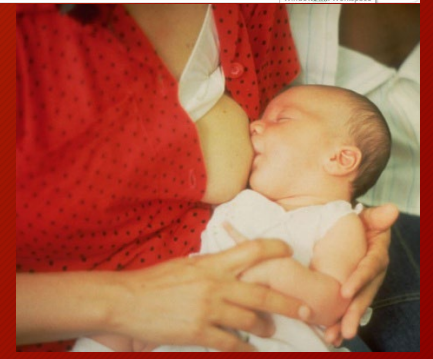


Section 2: CARE FOR SICK YOUNG INFANT AGED 0 UP TO 2 MONTHS

Module 1

- Part 1: Introduction
- Part 2: Assess and Classify
- Part 3: Identify the correct treatment and treat
- Part 4: Counsel the mother
- Part 5: Follow up
- Part 6: In your clinical practice





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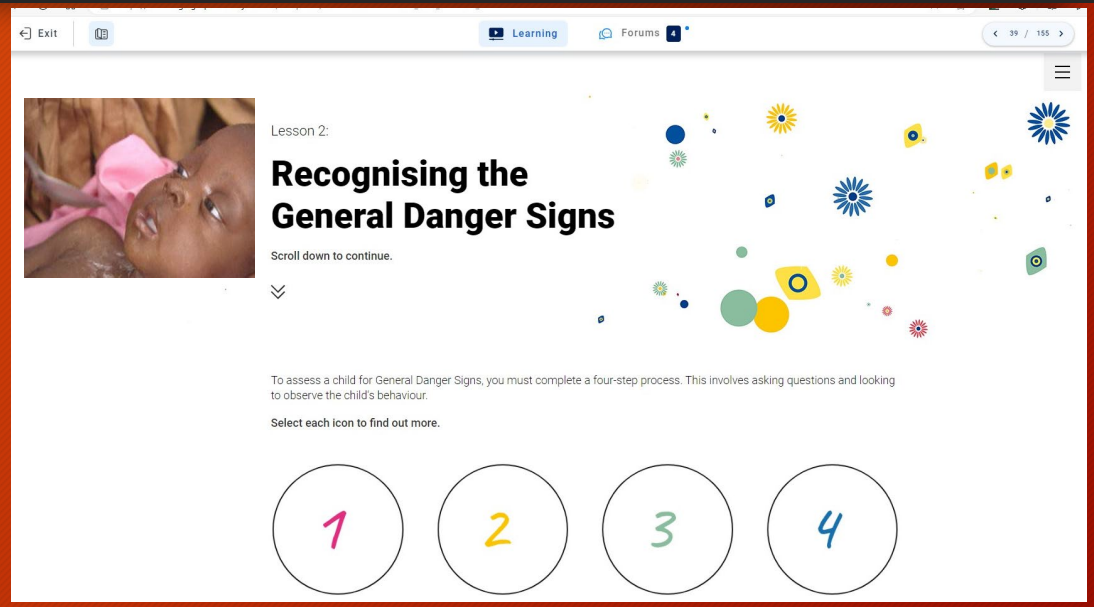
Section 3: CARE OF SICK CHILD AGED 2 MONTHS UP TO 5 YEARS

- Module 2: General Danger Signs
- Module 3: Cough or difficult breathing
- Module 4: Diarrheoa
- Module 5: Fever
- Module 6a: Acute malnutrition
- Module 6b: Anaemia
- Module 7: Ear problem



Section 4: SICK YOUNG INFANT AND CHILD WITH HIV/AIDS

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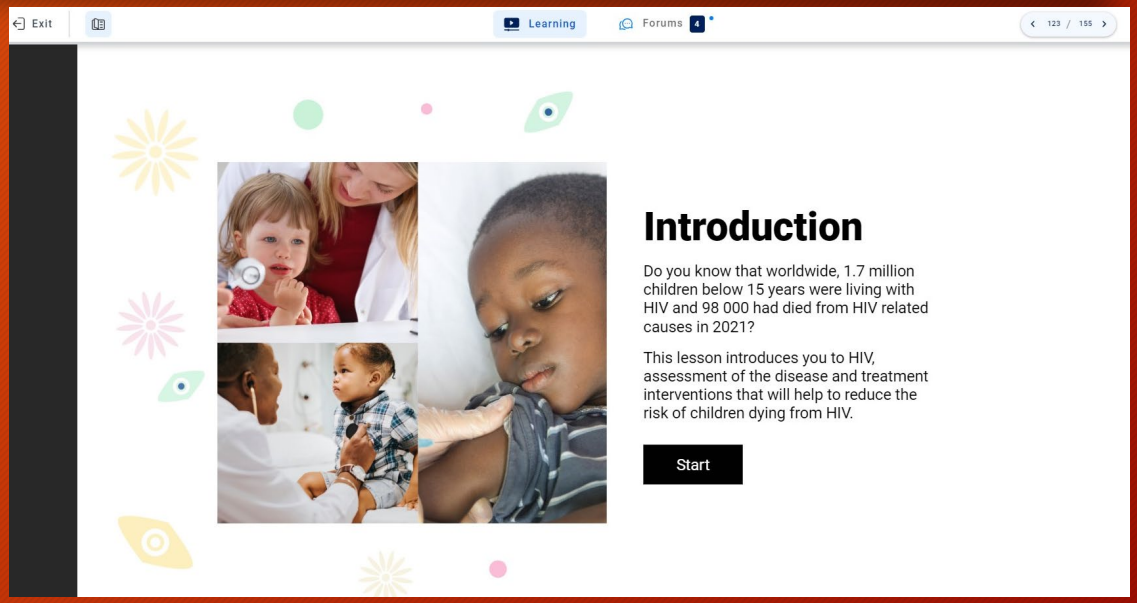
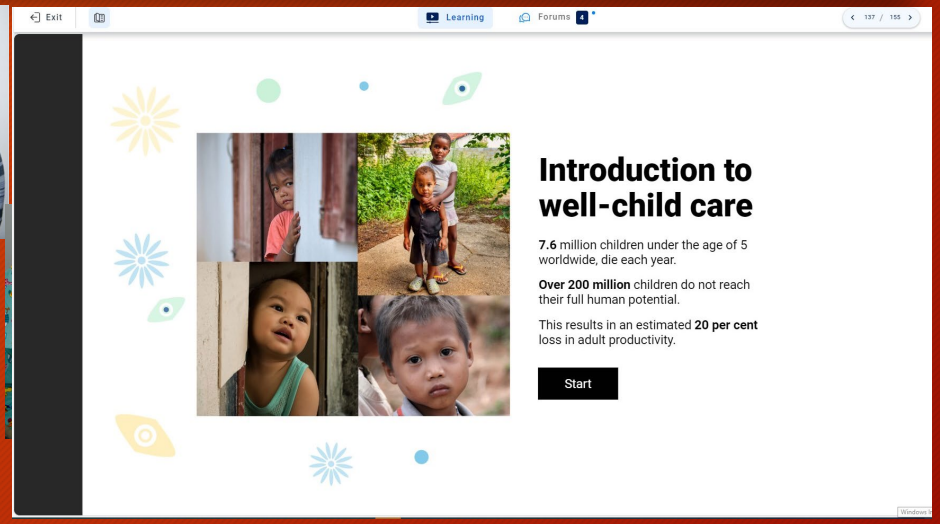
MODULE 8

1. Introduction
2. Testing for HIV infection
3. Assessment & classification of SYI or child with HIV infection
4. Identification of treatment for HIV infected or exposed
5. Treatment for HIV infected SYI or child
6. Prophylaxis and preventive measures
7. Counseling caregiver
8. Follow up care
9. Clinical practice

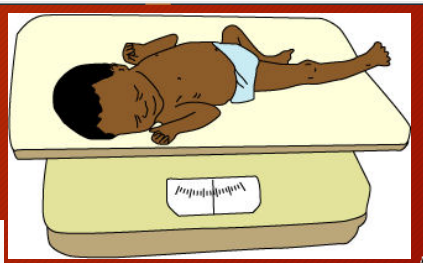


Section 5: CARE FOR THE WELL CHILD



MODULE 9

1. Module 9A: Growth monitoring and feeding
   - Introduction to well childcare
   - Growth monitoring
   - Assessment of common feeding and nutrition problems
   - Counseling on feeding recommendations
2. Module 9B: Monitoring a child's development
   - Child development
   - Counselling on responsive caregiving and early learning
   - Developmental monintoring and counselling
3. Module 9C: Immunization and other preventive measures
   - Immunization
   - Vitamin A, deworming and insecticide treated nets
   - Clean and safe home environment
   - Preventing accidents and injuries



What is the place of #Smart dIMCI Course in IMCI training?

- **Continuing professional development in-service :**
  - a course for formal initial IMCI training
  - a resource for refresher self-learning and update
  - a reference tool for health workers
- **Pre-service training:**
  - a teaching and learning resource for students on IMCI
  - a resource for combined individual or group IMCI training for students.
  - reference source materials on IMCI for students

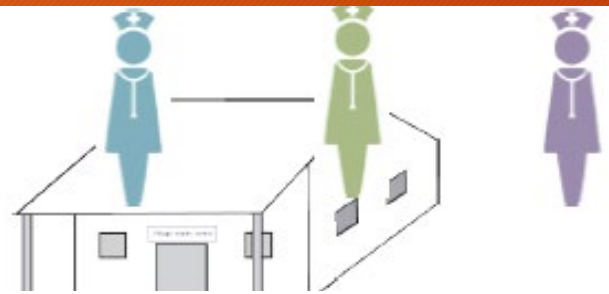
Possible models for self-study and clinical practice

Individual self-learning

Group self-learning

Self-study and practice
Health centre or clinic

1



2

Group study and practice
Same health facility

Self-study and practice
Health centre or clinic

Self-study and practice
Health centre or clinic

3

Group study and practice
Health centre or clinic

Please diseminate across your networks

Summary

1. #Smart dIMCI course is designed as an option for IMCI training for both:
   - Pre-service – training institutions (medical universities, medical and paramedical schools)
   - In-service – to train or refresh healthcare providers
2. IMCI training should be part of paediatric CPD but inclusive of clinical practice to ensure clinical skills acquisition & certification.
3. Different training/learning approaches can be used to scale up training in countries.

Enroll and/or disseminate to the primary care workforce

WHO Academy

Building skills and competencies for a healthier world

World Health Organization

WHO Academy

Rationale for the Academy

1. Part of WHO's transformation agenda to make the Organization more efficient
2. Centralize and build a unified learning ecosystem for capacity building on health
3. Increase impact of learning and support the achievement of SDG 3
4. Work with Member States to integrate learning needs on current and emerging public health priorities at the global, regional, national, and community levels

Transforming learning for health impact

*By 2030, globally 350 mn people will be working to improve public health

Swift pace of scientific discovery requires health professionals to stay in tune with latest health guidances

WHO works with Member States to implement life-saving health information

Academy is well-positioned to deliver trusted, evidence-based and actionable health guidance WHO has been producing and disseminating for 75 years

*WHO 2022 projections, based on pre-COVID-19 trends

Vision, mission and strategic objectives

Vision:	“A world in which health workers, policy makers and WHO staff have the skills and competencies they need to contribute to all attaining the highest possible level of health”.
Mission:	Build a lifelong learning ecosystem that enables health professionals to develop their capabilities and enhances global health literacy.
Strategic objective:	To expand and enhance learning opportunities for health professionals globally.

"The WHO Academy is an investment in health, education, knowledge and technology, but ultimately it’s an investment in people, and in a healthier, safer, fairer future."

— Dr Tedros Adhanom Ghebreyesus

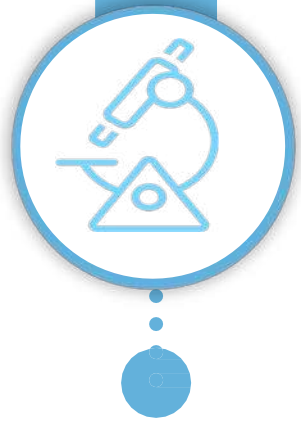
Director-General, WHO

The goals that deliver our strategic objective are…

01

1. Provide innovative learning content on WHO priorities

02

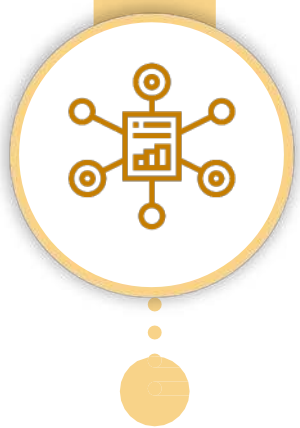


2. Provide high-quality, learner-oriented courses.

03

3. Build partnership-based global learning ecosystem that promotes innovative lifelong learning practices in the health sector.

04



4. Develop and disseminate quality standards and competency-based recognition framework for health courses delivered by WHO and partner institutions

05

5. Facilitate skills development and foster a culture of continuous learning within WHO

Our target learners

Health care workforce	Decision-makers
General public	WHO's global workforce

Our learning solutions

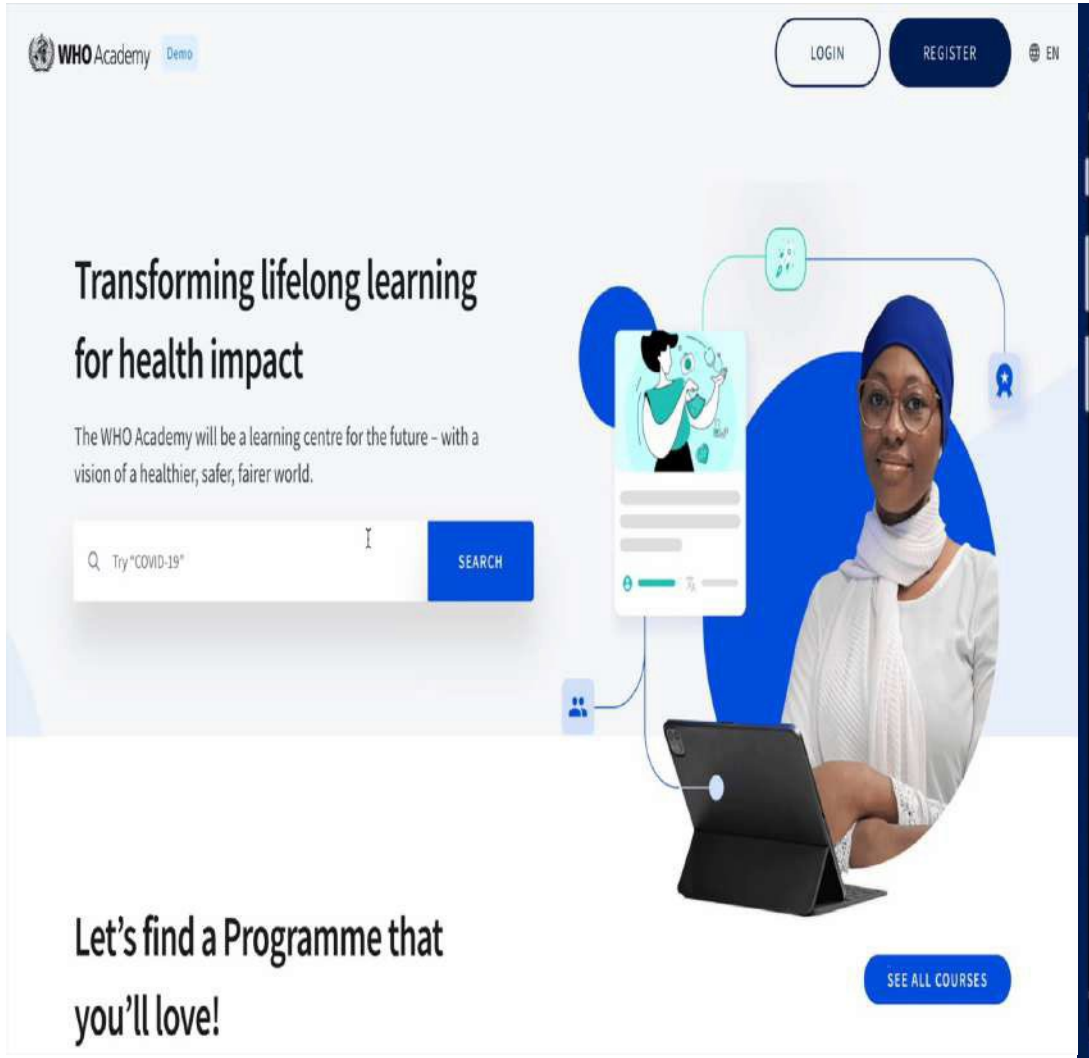
Types of courses on Academy platform

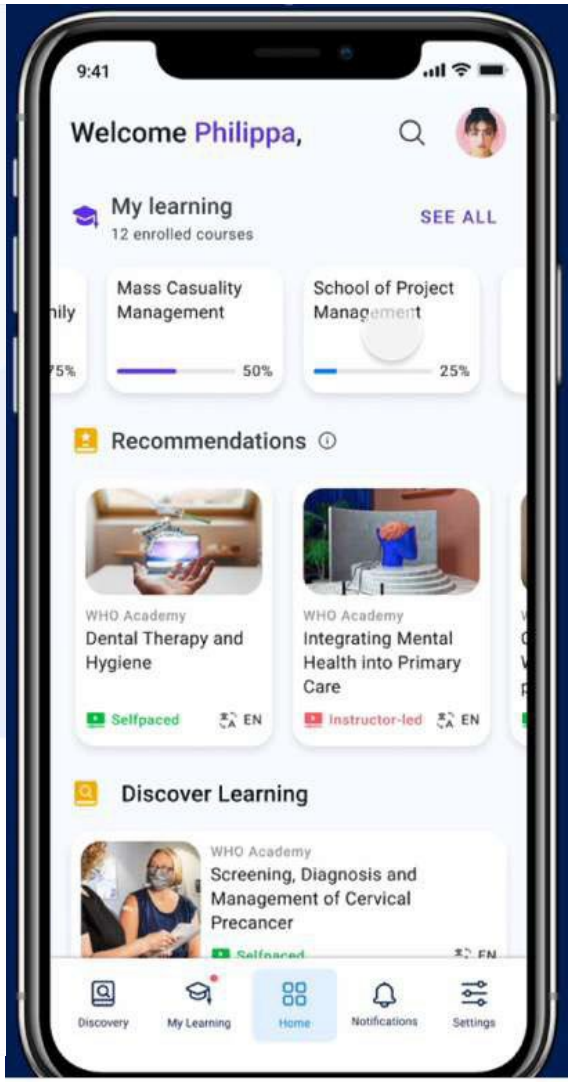
1. **Courses** available on Academy's Learning Experience platform (LXP), which allows learners to complete courses on the Academy's platform

2. **Courses produced -**
   - ✓ In-house by Academy with WHO technical units
   - ✓ Also co-produced with external collaborators

3. **Hosted courses** produced by external partners, but hosted on Academy's platform

4. **Gateway courses** provide access to courses that meet quality standards, but are produced and hosted on external platforms





How learning content is produced and hosted

1. Digital learning platform powered by Cutting-edge technology, AI, machine learning and web assistive technologies
2. Custom-built Learner-experience-platform (LXP) using open-source software to enable collaborations with a wide range of tech partners
3. Limited dependency on corporate proprietary solutions
4. LXP compatible with gamification, augmented and virtual reality solutions

Quality assurance and credentials

Quality assurance framework:

- **Quality by design:** a 9-stage process for designing and producing courses
- **Quality assurance processes:** quality reviews conducted at different stages
- **Quality assurance tools**: standards for course design, delivery and assessment

Credentials:

- Award of Completion
- Micro-credential badge
- Competency certificate

Evidence-based assessment design and data from learner assessment to substantiate credentials are at the core of our learning recognition framework

Anchored on partnerships

WHO Academy — a thriving ecosystem

- Content and knowledge development
- Trainings, workshops, seminars, conferences and exhibitions for health experts, clinicians
- Work with WHO Collaborating Centres, a network of over 800 research institutes/universities
- Leverage knowledge partnerships with health and allied sectors

Academy campus in Lyon, France

Specs

Inclusive, eco-friendly facility, built around learner needs

- 9 floors I 11 000 square metres
- State-of-the-art integrated technologies
- Virtual and hybrid learning spaces
- Virtual reality labs
- Bespoke simulation centre, where hospital floorplans and crises situations can be replicated to offer real-world training scenarios

Thank you

Pierre Berendes

https://web-staging.lxp.academy.who.int/coursewares/course-v1:WHOA+0009_IMCI_EN+2022_EN