The Role of Diagnostics in AMR response



- Limited number of free certificates from London School of Hygiene and Tropical Medicine (LSHTM) and Indian Council of Medical Research (ICMR)
- First come first served basis

Register now to sign up!



Who should take this course?

Health professionals, students or anyone who is interested to learn about the use of diagnostics in the prevention and control of antimicrobial resistance (AMR)

This is a six week online training course developed by the London School of Hygiene & Tropical Medicine

Module 1

Introduction

In the first week, we will introduce basic concepts of microbes, colonization and infection. Diagnostics can play a major role to respond to the increased threats being posed by overuse of antibiotics.

Module 2

Clinical Syndromes

In this week, we will examine three common clinical syndromes - respiratory infections, urinary tract infections and sepsis - for which the clinical presentation is non-specific and antibiotics are often prescribed presumptively.

Module 3

Healthcare Associated Infections (HAIs)

Now we will focus on bacterias that cause healthcare associated infections (HAIs). This includes: Methicillin- resistant Staphylococcus aureus (MRSA), Carbapenemase producing organisms (CPO), Clostridioides difficile (C diff), Vancomycin-resistant enterococci (VRE)

Module 4

Enteric Infections and the One Health Approach

We will focus on four bacterial pathogens that cause enteric or food- borne infections in humans and animals, and the need to use diagnostics in a One Health Approach for the prevention and control of AMR. This includes: Enteric infections, Salmonella spp., Shigella spp. and Escherichia coli

Module 5

Drug Resistant Infections: TB and NG

In this week, we will focus on the role of diagnostics in the detection and surveillance of drug resistance for Mycobacterium tuberculosis and Neisseria gonorrhoeae, two pathogens of public health importance that are rapidly becoming untreatable.

Module 6

The Future is in Our Hands

In our last module, we will learn about the global response to AMR, the various initiatives put forth by stake holders, and the role we can each play to control AMR.

Learn at your own pace

FutureLearn courses are divided into weeks, containing various activities that you should aim to complete within the week, each one built from a sequence of straightforward steps, to help you learn. Each week is given a descriptive name, so you always know what's expected, and you can even navigate between them, to see what's coming up, or catch up from the beginning if you're starting late.

Tools to foster retention

Throughout the six weeks we will use articles, mini-lectures, and interviews with experts in the field to highlight some of the key issues and thinking around the role of diagnostics in response to AMR. We will also build on our learning using a number of case studies, educational videos and animations. We encourage you to assess your learning through quizzes and share your experiences and views through discussion with fellow learners and the course team.

Some steps include reference lists and supplementary reading that you may find useful for further study.

Comments in the margin

Every article, video or piece of audio has a space to allow learners to comment and ask questions.

This appears in the margin on large screens or is revealed below on small screens.

You can discuss topics with each other and educators will offer guidance and answer questions. Press the comment button in the course to join the conversation.

What will you achieve?



By the end of this course, learners should:

- Have a greater awareness of AMR and how it is caused
- Be able to list infections and/or conditions for which AMR is posing the greatest public health threat, such as respiratory tract infections, urinary tract infections, healthcare associated infections, sepsis, gonorrhoea, and tuberculosis
- Have a greater awareness of the role of diagnostics in reducing the misuse of antibiotics for above conditions, in surveillance and in assessing the effectiveness of antibiotic stewardship strategie



Course materials are downloadable!

We encourage you to download, adapt, and re-use the content from this course for learning purposes



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ICMR is the implementing partner in India to activate and facilitate learning for this MOOC.





The MOOC has been developed by **LSHTM** in collaboration with a global advisory group.

