NON-COMMUNICABLE DISEASES
Introduction to Non-Communicable Diseases

Non-communicable diseases and mental and psychiatric illnesses are emerging as an urgent public health problem globally and becoming a major cause of early death and disability worldwide. In 2012, non-communicable diseases claimed over 2.2 million lives in the Eastern Mediterranean Region and caused 57% of mortality. Four groups of diseases, cardiovascular disease, cancer, diabetes, and chronic lung disease were responsible for 80% of this mortality; 65% of deaths were linked to risk factors. About 60% of people with chronic diseases die young, under the age of 70. Future projections indicate there will be an alarming increase in their prevalence, with the four main non-communicable diseases causing as many as 2.4 million deaths in 2025, unless serious action is taken.

Mental health and overall wellness are vital in tackling the global health problems that is related to noncommunicable diseases (NCDs). Findings from Global Burden of Diseases, Injuries, and Risk Factors Study 2015 (GBD 2015) showed that mental disorders are among the highest-ranking causes of nonfatal burden globally (GBD 2015 Disease and Injury Incidence and Prevalence Collaborators 2016). In parallel to this burden, most people in low and middle-income countries who have mental health problems are not supported by trained professionals, or able to access to evidence-based treatments. Improved understanding of the burden and the risk factors of non-communicable diseases help to prevent them and prevent the associated morbidity and disability. Therefore, there is a need to build the capacity of health workers about these conditions so that they can plan and implement interventions that help to reduce the burden associated with chronic diseases.

Non-Communicable Diseases Programs

The training in Non-Communicable Diseases consists of three programs, with three months duration for each program:

Program 1: Non-Communicable Diseases Epidemiology
Program 2: Mental Health Epidemiology
Program 3: Advanced Health Research Methods

Residents who complete the nine-month program requirements will be awarded a Professional Diploma

Eligibility Criteria

- Bachelor’s degree from a recognized university in health, medicine, behavioural, or social sciences, or any other related field of science.
- Preferably with work experience in a health-related field
- Demonstrated ability to study in English

In All Programs:

- Training Delivery method
  - In-class method
  - Blended learning method

- Training Language
  - Arabic
  - English

Who Should Apply

The target audience for this programs includes health workers, project managers, researchers, policy makers at all levels, and other relevant persons interested in non-communicable diseases.
As the leading causes of mortality in the world, non-communicable diseases account for about two thirds of all deaths. Most premature deaths from non-communicable diseases are largely preventable by enabling health systems to respond more effectively and equitably to the health care needs of people with non-communicable diseases, and influencing public policies in sectors outside health that tackle four shared modifiable behavioral risk factors. Research is expanding on the management, control, and prevention of non-communicable diseases and the evidence-based interventions targeting such problems are available. Therefore, there is a need to build the capacity of health workers about these conditions so that they can plan and implement interventions that help to reduce the burden associated with chronic diseases. A focused training on non-communicable diseases that accommodates the specific needs of countries in EMR is expected to have a considerable impact on reducing the burden of non-communicable diseases and the development and implementation of action plans to control and prevent non-communicable diseases and their risk factors.

**Learning Outcomes**

By the end of the program, participants will be able to:

- Describe non-communicable diseases, their significance, and the effect of globalization on their proliferation
- Explain the importance of determinants of non-communicable diseases and their implications for prevention
- Critically evaluate the measures of NCDs burden and their application from monitoring to policy evaluation
- Evaluate health system requirements and capacity for combating non-communicable diseases
- Translate NCD research into public health policy and programs of care
- Develop and implement multisectoral plans for the prevention and control of NCDs

**Training Courses**

- Introduction to Public Health
- Epidemiology of Noncommunicable Diseases
- Noncommunicable Disease Surveillance
- Health Promotion for Noncommunicable Diseases
- Prevention and Control of Noncommunicable Diseases

**Field Work**

Residents spend seven weeks in the field work in order to be exposed to real-life situations and to practice the skills they gain with the guidance of a dedicated mentor. The following field projects are expected to be conducted during the field work period:

- Develop a research proposal related to the prevention of any of non-communicable diseases or any of their risk factors.
- Analyze available secondary data on non-communicable diseases and their determinants and recommend relevant interventions.
- Assess the national capacity for the prevention and control of non-communicable diseases using the WHO survey tools.
- Develop a national action plan for accomplishing the WHO objectives from the 2013-2020 Global Action Plan for the prevention and control of non-communicable diseases.
- Develop a health promotion intervention.
- Evaluate any of the non-communicable diseases surveillance system in your country using the CDC’s updated guidelines.

Residents who complete the three-month program requirements will be awarded Technical diploma issued by International Academy of Public Health (IAPH) and accredited by Agency for Public Health Education Accreditation (APHEA).
Mental illness is a growing public health concern. According to the Global Burden of Diseases, Injuries, and Risk Factors Study 2015 (GBD 2015), mental disorders are among the leading causes of nonfatal burden worldwide. According to the GBD 2015, depressive disorders and anxiety disorders, in particular, were leading contributors to years lived with disability (YLDs), a measure of nonfatal burden.

Most people in low and middle-income countries who have mental health problems are not supported by trained professionals, or able to access to evidence-based treatments. Improved understanding of the burden and the risk factors of mental health disorders help to prevent them and prevent the associated morbidity and disability. Therefore, there is a need to build the capacity of health workers about these conditions so that they can plan and implement interventions that help to reduce the burden associated with mental health disorders. A focused training on mental health disorders that accommodates the specific needs of countries in EMR is expected to have a considerable impact on reducing the burden of mental health disorders and the development and implementation of action plans to control and prevent mental health disorders and their risk factors.

### Learning Outcomes
By the end of the program, participants will be able to:
- Describe the epidemiology of mental health problems and their determinants
- Evaluate the measures of mental disorders burden and their applications.
- Compare mental health services and the barriers to these services
- Describe the diversity of mental health and psychosocial issues in complex emergencies
- Design, conduct, and interpret quantitative mental health research studies
- Plan and design effective, efficient, culturally sensitive, and ethical mental health interventions and mental health promotion actions

### Training Courses
- Epidemiology of Mental Health Disorders  
- Mental Health Programs and Interventions  
- Mental Health in Complex Emergencies
- Research in Mental Health
- Applied Research in Noncommunicable Diseases

### Field Work
Residents spend seven weeks in the field work in order to be exposed to real-life situations and to practice the skills they gain with the guidance of a dedicated mentor. The following field projects are expected to be conducted during the field work period:

**Option 1:** Conduct a study in a specific topic of interest in mental health (e.g., eating disorders, addiction, depression, anxiety, schizophrenia, mania, intimate partner abuse, child abuse, suicide, etc.).

**Option 2:** Residents will identify one community-based mental health promotion/prevention program. The program may focus on behavior change, changing local environments, public education, or developing new policies.

**Option 3:** Develop a mental health promotion/prevention program targeting one of the mental health issues.

**Option 4:** Use the WHO-AIMS tool to:
- Explore the current state of mental health services and policy quantitatively in your country
- Assess key components of a mental health system in your country
- Generate essential information that can be used to strengthen mental health policy, service delivery and provide suggestions for future direction and development in your country.
Program Overview
This program is designed for public health staff and health professionals working at various levels of the health system and is designed to extend upon the topics taught in introductory program and covers more advanced methods for the design, conduct, analysis and interpretation of epidemiologic studies. The main focus of this program is on providing residents with an understanding of methodological health research issues as well as analytical and practical skills of designing and conducting epidemiologic studies. It includes more rigorous discussion of key epidemiologic concepts and methods such as modern study designs and measures of association and impact.

Throughout this program, methodological and design issues are integrated with statistical techniques and applied by extensive use of the SPSS package. With real-life examples throughout, the program avoids complex statistical formulations. Moreover, this program is intended to increase the ability of residents to interpret and criticize research articles in the medical literature.

Learning Outcomes
By the end of the program, participants will be able to:
- Design and conduct unbiased and efficient health research studies, through avoiding common problems and pitfalls
- Interpret and criticize research articles in the medical literature
- Analyze the data from epidemiological research by applying the essential features of advanced statistical techniques.
- Write scientific manuscripts for publication

Training Courses
- Advanced Research Methods
- Advanced Statistical Methods
- The Statistical Tools (Epi Info)
- The Statistical Package For Social Sciences (IBM SPSS)
- Scientific Writing

Field Work
Residents spend seven weeks in the field work in order to be exposed to real-life situations and to practice the skills they gain with the guidance of a dedicated mentor. The following field projects are expected to be conducted during the field work period:

Pilot test the study procedures and instruments and revise the study instruments and tools based on the pilot testing. Procedures include data collection, data entry, data analysis

Residents who complete the three-month program requirements will be awarded Technical diploma issued by International Academy of Public Health (IAPH) and accredited by Agency for Public Health Education Accreditation (APHEA).