



Ministry of Public Health and Population
Primary Health Care Sector
General Directorate of Disease Control and
Surveillance



Yemen Field Epidemiology Training Program (Y-FETP)

2022:
Year In Review



Editor's Letter

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We -at the Yemen Field Epidemiology Training Program (Y-FETP)- are pleased to present to you this special annual newsletter, in which we highlight the achievements of the program during the 2022. The most prominent of which were the convening of the Fifth National Conference on Field Epidemiology, the program's celebration of the graduation of the Fifth Cohort and the commence of training for the sixth cohort of the advanced tier, as well as the launch of the first cohort of the intermediate tier. Furthermore, the ongoing development of skills of districts' surveillance coordinators through holding the basic tier: Public Health Empowerment Program (Tamkeen).

The bulletin also contains various collections that highlight the work accomplished by the members of the various tiers in the Y-FETP, and the program's continuous efforts in building the capabilities of its trainees and cadre of the Ministry of Public Health and Population

We take this opportunity to express our sincere thanks to the leaders of the Ministry of Public Health and Population for their continuous support to the program and its cadres. We are also grateful to our partners: the Global Network of Training Programs in Field Epidemiology (TEPHINET), the Center for Disease Control (CDC), the World Health Organization (WHO), and Eastern Mediterranean Public Health Network (EMPHNET).

We hope that this issue will serve as a source of inspiration for our program in the coming years, and for the rest of the programs and those interested in the field of field epidemiology in the region and at the globe.

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The Yemeni Field Epidemiology Training Program Holds its Fifth National Field Epidemiology Conference with a Wide International, Regional and Local Participation

Exemplifying the belief of the Y-FETP in the importance of the research in highlighting scientific evidence and use to bring positive changes in health, the program held its Fifth National Conference under the title: "A Decade of Field Training in Epidemiology in Yemen: Linking Research to Decision Making" during the period from February 28 to March 3, 2022.

The conference was inaugurated under the generous patronage of the Minister of Public Health and Population. It was opened by the three undersecretaries of the Primary Health Care Sector, the Curative Medicine Sector, and the Population sector, with the active participation of representatives of international and regional organizations (e.g. WHO, UNICEF, IOM, and EMPHNET). With the presence of about 300 participants from the leaders of the Ministry of Public Health and Population and its offices in the governorates, directors of health programs, and a large number of academicians, and researchers. In addition, there was wide participation via the web from researchers representing different regional and international bodies.

During the conference, 72 oral abstracts and 17 scientific posters from Yemen, Pakistan, Egypt and Sudan were presented that covered a wide range of public health topics, such as outbreak investigation, analysis and evaluation of surveillance systems, communicable and non-communicable diseases, and maternal and child health.

At the opening session of the conference, speeches were delivered by program partners at the CDC, WHO, TEPHINET, and EMPHNET. Dr Anthony Costello, Professor of Global Health and Sustainable Development at, University of London, and former Director of WHO Department of Maternal, Newborn, Child and Adolescent Health, delivered a keynote speech titled "Connecting Research and Decision Making: Our Children's Future". Four important pre-conference workshops were held on writing scientific papers, investigating outbreaks, tracing contacts during epidemics, and biosafety and biosecurity. Furthermore, four roundtable discussions were also held on the evaluation of the Basic Epidemiology Program/Tamkeen, the Vaccine-derived poliovirus: A threat to the end game of polio eradication, COVID-19:Lessons Learned and Lessons for Future, and Yemen's experience in partnership with the Global Fund to Fight AIDS, Tuberculosis and Malaria.

The conference was widely covered and praised by local, regional and international bodies.



Y-FETP Celebrates the Graduation of the Fifth Cohort of the Advance Tier

On the sidelines of the Fifth Y-FETP National Conference, Y-FETP celebrated the graduation of the Fifth Advance Tier Cohort under the patronage of His Excellency the Minister of Public Health and Population.

After welcoming the attendees by the Program Director: Dr. Abdul Hakim Al Kohlani, the Director General of Disease Control and Surveillance Dr. Khaled Almoyaed reviewed the great efforts made by the residents since their enrollment in the program and their distinguished work in supporting the public health programs through analysis of data, evaluation of health interventions, outbreak investigation and response, and active participation in the various activities of the Ministry such as immunization campaigns. Furthermore, the residents through field studies contributed to finding solutions to health problems.

In his speech, the Undersecretary for the Primary Health Care Sector congratulated the Ministry, the program and the graduates on this important achievement despite the difficult conditions experienced by Yemen -as a whole- and Ministry of Health in particular. He stressed that their graduation represents the real beginning for them and not the end. As building the capabilities of the health workforce, especially in the field of epidemiology, is a priority for the Ministry, he renewed the ministry's support for the program and graduates, who will boost health system performance.

More than 300 participants participated in the graduation ceremony as representatives of health programs and various departments of the Ministry and its governorate branches, academicians and representatives of international organizations including WHO, UNICEF, and EMPHNET, as well as the families and colleagues of the graduates.

At the end of the ceremony, the Undersecretary of the Primary Health Care Sector, along with the Y-FETP Director, handed over graduation certificates to the graduates, signed by His Excellency the Minister of Public Health and Population and the CDC, Atlanta.

A certificate of appreciation was also given to the family of the late Prof. Ali Al-Sabri, a member of the program's technical team, who has contributed over the past years to training the program's cadres. An honorary certificate was also awarded to Dr. Ahmed Al Goaish, a resident of the fifth cohort, who passed away while joining the program after an incurable illness.



Y-FETP Commences Training for the Sixth Cohort of the Advance Tier

Despite all the challenges, resulting from the war and siege that Yemen in general suffers from, and the health sector in particular, Y-FETP continued its tasks by launching its sixth cohort in March 2022.

This inauguration was preceded by a preparatory period from December 2021 to February 2022, during which an intensive course was held to improve the skills of the enrollees in the field of English Scientific writing and communication.

During March 2022, training for the sixth cohort began with the introductory course, which lasted four weeks. During the first week, the focus was on the various descriptive and analytical epidemiological methods, and the measures used in biostatistics such as central tendency and measures of dispersion. Emphasis was also placed on how to analyze surveillance systems and conduct investigations of outbreaks and epidemics using sound methods.

In the second week, the residents were introduced to the steps to be followed when designing research and field studies, starting with defining the problem and reviewing the literature, passing through writing the objectives, then the research methodology, which includes choosing the appropriate variables, the type of study, data collection techniques, and sampling methods. Each of these steps has been practically applied, as each resident was asked to choose a research problem that he would like to study in the future, and to apply each step of the research to the problem he chose. Each participant makes a daily presentation on the research problem that he has chosen and how he applied each step of the research to it.

During the third week, the residents were trained in some advanced computer skills through the use of the Microsoft package and its various programs such as Excel, Word, and PowerPoint.

In the fourth week, the residents were practically trained on the *Epi Info* statistical program and how to use it in designing questionnaires, entering and analyzing data, and preparing report.

During the months of April and May, the residents organized a special session during which they visited 33 programs and departments of the Ministry of Public Health and Population to introduce them to the health problems concerned by these programs and departments and how they can later contribute to supporting them in achieving their goals. During these visits, the directors of the programs and the various departments organized an exploratory tour for the residents to visit the various departments of their programs and introduce them to their tasks and work mechanism.

In the second half of 2022, the residents were distributed to the main programs to fulfill the main requirements, the most important of which are to analyze the surveillance data and to evaluate the surveillance systems as well as investigating outbreaks.



Y-FETP Launches the First Cohort of Intermediate Tier Funded by WHO and World Bank

As a commitment to complete its training hierarchy and qualifying an integrated network of qualified cadres in epidemiology at different levels, the Y-FETP launched in May 2022 the first cohort of the intermediate tier with the support from the World Health Organization and the World Bank.

Given the intense competition to join the training, a screening session was held for 40 applicants in May, after which, based on the marks of the participants, 25 participants were selected, including 15 from the governorate surveillance coordinators and 10 from the staff in the central programs at the Ministry of Health.

The program began with an introductory course for two weeks during the month of June 2022, during which an introduction was given to the basics of epidemiology and statistics, with a focus on the principles of epidemiological surveillance and the requirements for the first field work related to the analysis and evaluation of surveillance data. A quick review of the skills in using Microsoft programs, especially Excel, Word and PowerPoint programs, was also conducted. After that, the participants spent two months in their workplaces analyzing surveillance data in one of the priority programs or diseases and evaluating its quality.

The second workshop was held in August 2022, where the first two days were devoted to reviewing the results of the first field work related to the analysis of surveillance data. During the rest of the week, the principles of outbreak investigation and the requirements of the second field work related to the investigation of outbreaks were covered. During the second week, the participants were given an introduction to the *Epi Info* statistical program, questionnaire design and data entry. Then, the participants returned to their workplaces, where each resident investigate two outbreaks.

During the month of October 2022, the third workshop was held for two weeks, where the first two days were devoted to presentations by participants on the second deliverable of investigating outbreaks. Then, the participants were trained on the steps of conducting a field study including preparation of the protocol, and statistical analysis skills using the *Epi Info* program. After that, the participants returned to their places of work to carry out the field study.

In December 2022, the fourth workshop was held for a week. During the first two days, the participants reviewed the results of their field studies, and the rest of the week was devoted to training them on the principles of health management, leadership and strategic planning. After that, they returned to their workplaces to carry out their fourth deliverable, which is to prepare a strategic plan for their various programs or departments.

It is expected that the closing workshop will be held in March 2023 to present the results of the fourth deliverable, and then the graduation ceremony will be held and certificates will be distributed.



Y-FETP Continues to Develop the Skills of the Districts' Surveillance Officers through Organizing the Public Health Empowerment Program (Tamkeen)

An evaluation of the Tamkeen program that was conducted in 2021 by Dr. Labiba Anam, Deputy director of the Y-FETP, with support from EMPHNET showed the great contribution made by Tamkeen graduates in raising the level of performance of the surveillance system, especially in remote districts, and their active role in confronting epidemics such as cholera and diphtheria. Therefore, the Y-FETP continues bridging the gaps resulting from the shortage of qualified epidemiological surveillance staff at prepheral level, through organizing the Public Health Empowerment Program (Tamkeen) for Districts' Surveillance Officers.

During the year 2022, two cohorts were trained with the support from the EMPHNET and four cohorts with the World Bank and WHO support. More than 160 trainees graduated from the governorates of Hajjah, Ibb, Al-Bayda, Al-Dhalea, Al-Mahweet, Dhamar, Amran, Taiz, Marib, Al-Jawf, as well as some staff of central programs at the Ministry of Health and Population and the Department of Preventive Medicine at the Police Hospital. The graduates were qualified to respond to any incident with potential impacts on public health.

The three-month course aims to build the capacities of the surveillance officers on the basics of surveillance, investigation of outbreaks, emergency response and principles of health management. It includes three training workshops, in addition to two field projects that implemented after the first and second workshops, under the supervision of qualified mentors.

During the first field project, the trainee analyzes a set of surveillance data, then writes a brief report on the results of the analysis, then conducts an audit of the quality of the data and makes visits to some of the sites selected for surveillance, during which he provides feedback to its employees. In their second fieldwork, the trainees investigate one or more outbreaks and report on the results of this investigation. From 2017 to 2021, 12 cohorts graduated from the program, in which more than 200 trainees participated.

As an a model that shows the trainees' commitment and keenness to participate in this training is that one of the trainees, although she was nine months pregnant during the last workshop and began to feel labor pains, decided to complete the training and attend the graduation ceremony, and she had a baby during the last day of the workshop which was named "Tamken" after the training name. She was honored by the Y-FETP and EMPHNET in recognition of her dedication. She was honored by the Y-FETP and EMPHNET in recognition of her dedication.



Y-FETP Trainees Accomplish 200 Surveillance data Analyses at the Ministry of Public Health and Population and its Governorates and Districts Branches

Effective epidemiological surveillance is essential for detecting, responding to and reporting outbreaks. Strengthening the epidemiological surveillance system in Yemen is at the core of the Y-FETP. The analysis of surveillance data and the monitoring of morbidity and mortality resulting from them in order to direct prevention and control measures is one of the priorities of the Ministry of Health, which the Y-FETP seeks to contribute to achieving.

Therefore, it is required, during enrollment in any of the three tiers of the program (advanced, intermediate, and basic / Tamkeen) that the trainees practice what they have learned by analyzing the data of a disease surveillance system and writing a report highlighting the most important results of the analysis.

During the year 2022, program Y-FETP trainees in various tiers analyzed > 200 surveillance data for priority diseases, whether communicable (e.g. malaria, tuberculosis, schistosomiasis, dengue fever, and vaccine-preventable diseases) or non-communicable (e.g. cancer and malnutrition).

The program's trainees carried out these analyses at the different levels of the health system, whether at the central level (the Ministry of Health and the main programs) or at the peripheral level (governorates, directorates and health facilities).



Y-FETP Trainees Evaluate 35 Surveillance Programs at the Ministry of Public Health and Population and its Governorates and Districts Branches

The role of epidemiological surveillance in public health is to provide information that can be used in health procedures in a timely manner by decision makers, officials and society to guide public health policy and programs. As part of the Y-FETP 's commitment to strengthening the health system and providing and disseminating evidence-based data, the program's trainees in the intermediate and advanced tiers evaluated during the year 2022, 35 surveillance systems e.g. acute flaccid paralysis, meningitis, and tuberculosis.

These evaluations aimed to ensure that priority public health problems are being monitored efficiently and effectively and that the surveillance systems achieve their objectives.

Evaluation of these systems included evaluations of the systems' attributes, including simplicity, flexibility, data quality, acceptability, sensitivity, positive predictive value, representativeness, timeliness, and stability. The evaluation also includes making appropriate recommendations to improve the quality and efficiency of the system.

These evaluations of surveillance systems will help to determine which surveillance systems are useful and achieve their objectives. It will also contribute to the optimal use of health resources and ensure that surveillance systems operate in an efficient and effective manner.



Y-FETP Trainees Participate in Investigating more than 200 Outbreaks in 15 Governorates and Contribute to its Rapid Containment

At a time when the health system in Yemen is being severely affected by the complex humanitarian emergency due to the war and the siege that has been going on for nearly eight years, Yemen is facing a significant increase and frequent occurrence of disease outbreaks, especially with the low level of immunization coverage and poor infrastructure such as water and sanitation. This made efforts to combat and eliminate communicable diseases confront with great difficulties and challenges.

Therefore, the role played by the trainees and graduates of the three Y-FETP tiers (advanced, intermediate, basic / Tamkeen) through their work in the areas of investigating outbreaks, is a key in strengthening the national health system, and a prerequisite for any response aimed at to alleviate the burden of communicable diseases.

Therefore, Y-FETP requires from its trainees of all tiers of the program is to investigate at least two outbreak during the period of their enrollment.

In the year 2022, the program's trainees investigated more than 200 outbreaks in many governorates of the Republic, the most important of which were cholera, dengue fever, malaria, and vaccine-preventable diseases such as measles, diphtheria, and whooping cough.

During these investigations, the program's trainees contribute to carrying out the preliminary measures to control outbreaks. They also held meetings with the local authorities and the relevant program at the Ministry to inform them about the preliminary results of the investigation, and to discuss the necessary measures to control them and prevent their occurrence in the future.



Y-FETP Participates in Public Health Empowerment Program (Tamkeen) Training for supervisors of Expanded Program on Immunization

As part of the support of the Global Health Development (GHD) / EMPHNET to the Ministries of Health in the Eastern Mediterranean Region in promoting routine immunization, the GHD/ EMPHNET supported the Ministry of Health to hold a special training of the Public Health Empowerment Program "PHEP/Tamkeen" targeting Expanded Program on Immunization (EPI) supervisors. The course commenced on September 17, 2022, with the participation of 9 supervisors from central level and 14 from governorates.

The main objective of the training is to build the epidemiological capacity of EPI supervisors through training them to perform basic tasks that support vaccine preventable diseases' surveillance, outbreaks investigation, and response as well as report writing, management, leadership, communication, and supportive supervision. The program focused on enabling the trainees to prepare detailed plans of high quality to raise the coverage of routine immunization.

Dr. Mohamed Al Amad, Y-FETP director assistant and senior epidemiologist in the Y-FETP participated in the design and implementation of the training together with the Minister Advisor Dr. Ali Al Madwahi and Dr. Esmail Al Dobes (Y-FETP 4th cohort graduate) together with the senior EPI staff.

After the participants completed three months of intensive theoretical and field training, the graduation ceremony was organized on December 7, 2022, in the presence of the Undersecretary of the Ministry of Public Health and Population for the Primary Health Care Sector, Muhammad Al-Mansour, and the Director of the Expanded Immunization Program, Dr. Ghada Al-Haboub and Deputy Director of the Y-FETP, Dr. Labiba Annam.



Y-FETP Continues to Build the Capacities of its Trainees and Cadres of the Ministry on Outbreak Investigation, Rapid Response, and Biosafety and Biosecurity

Within the Y-FETP framework for developing the capabilities and skills, the program implemented during 2022 several training and workshops. The overall aim is to enhance the skills and knowledge of the of Y-FETP trainees and the MoPHP cadre in a way that contributes to achieving better quality and efficiency when providing various health services and enable the participants to work as trainers for other workers in the health field.

The program held a workshop (July 23-27) in the field of outbreak investigation and rapid response, during which the focus was on the three phases of outbreaks investigation (descriptive, analytical, and response) and how to implement in various types of outbreaks, whether foodborne, vector borne, Vaccine-Preventable. The importance of documenting the results of the investigation and writing the investigation report was emphasized.

A rapid response course was also held during the period from 10-14 August, to build the capacities of the trainees in dealing effectively with public health emergencies, crises and humanitarian disasters. The structure, management and standard operating procedures of the rapid response team were discussed. Basic indicators in emergencies, their assessment and management, as well as ways to control communicable diseases during emergencies was also introduced. The training was conducted in cooperation off the electronic Integrated Disease Early Warning System (eIDEWS)

During the period from December 2 to 7, a workshop was held on biosafety and biosecurity, to raise knowledge and practices related to infection control, assessment of biological agents, laboratory procedures, risks management, environmental hazards, and methods of medical waste management.

These workshops were implemented by the Y-FEP technical team and local consultants -when required- and used a variety of training methods to impart information, including presentations, open discussion, realistic scenarios, and case studies. and groups' work.



Y-FETP Holds Five Mentors' workshops for the Various Program Tiers

Effective mentoring is one of the main pillars of the Y-FETP, and a condition for its success and to promote public health capacity through the technical support provided by mentors to trainees when they implement in the field the new skills they have learned.

The Y-FETP held during the year 2022 five workshops for the mentors of the various tiers (advanced, intermediate, and basic / Tamkeen) where most of whom were graduates of the previous cohorts of the program.

The workshops focused on the field guidance and supervision skills and strategies needed by the mentors to support the trainees. A detailed form of the Y-FETP field work plans was also reviewed to familiarize the mentors with the deliverables that must be accomplished by the Y-FETP trainees in order to be graduated successfully.

The workshops also dealt with the technical and administrative issues necessary for the success of mentoring, including the responsibilities of mentors, and how to help trainees manage their time and overcome obstacles that they may encounter during field work.

During these workshops, the mentors were trained on how to use the various packages prepared by the program to ensure mentoring quality, such as the check lists, trainee's record, and evaluation tools.

Different methods of learning were used during the workshops including presentations, plenary discussions, group work and role plays.

Programs that contributed to guiding Y-FETP trainees were also honored and certificates were distributed to the best programs in mentoring the Y-FETP trainees.

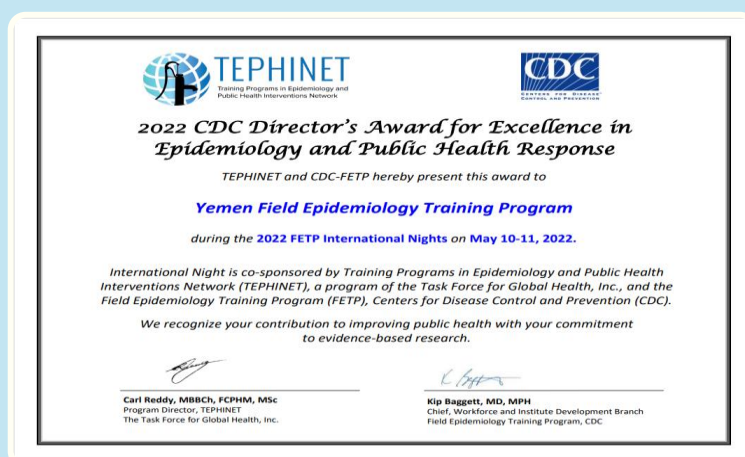


Y-FETP Wins 2022 CDC Director's Award for Excellence in Epidemiology and Public Health Response

In recognition of the role played by the Y-FETP in promoting public health and contributing to confronting and responding to threats facing the health system, the program won the 2022 Center for Disease Control (CDC) Director's Award for excellence in epidemiology and public health responses.

This award was presented during the International Nights held on the sidelines of the 69th International Conference on Epidemiology (EIS), which was held in the United States on May 10-11, 2022. The role of the program in training workers at the national, provincial and district levels in the field of epidemiological surveillance and disease prevention, investigating infectious diseases, improving early detection and response skills to outbreaks, effective communication with society, and improving the availability and use of data for decision-making purposes, was well recognized.

Out of more than 70 international programs, the award was previously awarded to only four programs (Nigeria, Pakistan, Uganda, and Brazil) in recognition of their significant contributions in the field of successful response to public health emergencies, disease outbreaks, epidemics, natural or man-made disasters, etc. This was the first time that this award was awarded to a field epidemiology program in the Arab world.



Y-FETP Participates in the 11th TEPHINET Global Scientific Conference and Wins Best Poster Presentation and Best Photo Awards

Sharing the results of research and field studies through national, regional and international conferences is an important factor in spreading the knowledge and contributing to the use of evidence to bring positive changes in global health.

The Y-FETP considers this an integral part of the program's mission in training in the field of epidemiology. Therefore, each resident of the advanced tier in the program is required to present at least one oral presentation or poster at a regional or international conference. The program also encourages trainees of the intermediate tier and the basic tier / Tamkeen, as well as all graduates, to participate in such conferences. Such participation provides a good opportunity to communicate the results of field studies, analyses and evaluations of surveillance systems, and investigations of outbreaks, to those interested, whether at the local, regional or international level, and benefit from their feedback.

Moreover, the participation of residents and alumni in these conferences contributes to keeping them in touch with the latest knowledge in the field of public health and epidemiology by participating in discussions and attending plenary sessions and pre-conference workshops.

In addition, the networking opportunities with other field epidemiology programs and public health professionals offered by these conferences are invaluable and contribute to strengthening the linkages between the different programs and increasing cooperation among them.

Despite the challenges that the Y-FETP and its trainees face as well as the difficulties in obtaining visas and financing travel due to the ongoing war and the siege imposed on Yemen, the program seizes any opportunity to participate in conferences and present scientific works. Even if it is not possible to participate in person, it participates virtually.

During 2022, the program participated in the 11th TEPHINET Global Scientific Conference held in Panama from 4-9 September, with four abstracts from Dr. Sumia Alturki, Dr. Othman Bahashwan, Dr. Maeen Abduljalil, Dr. Waleed Al-Marrani.

During this conference, the Y-FETP won the best poster presentation award, which was presented to Dr. Sumia Alturki and the best photo presented by Dr. Ehab Al-Sakkaf during the celebration of the International Epidemiological Day that took place during the conference.



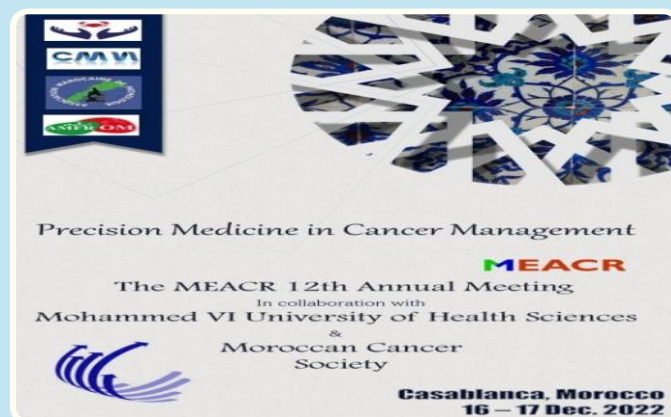
Y-FETP Participates in the 12th Annual Meeting of the Middle East Association for Cancer Research

Cancer is the second leading cause of death in the world, claiming nearly 10 million lives in 2020, or roughly one in every 6 deaths. In the Eastern Mediterranean Region, cancer kills an estimated quarter of a million people each year.

Although the exact figures for cancer incidence in Yemen are not well-known for many reasons, including limited diagnostic and therapeutic tools, and poor medical records, the war and siege have contributed to the difficulty of determining the burden. Despite its scarcity, cancer research published from Yemen- some Y-FETP residents- indicated an increasing burden of cancer, and the need for more attention to study this important and serious health problem.

The Middle East Association for Cancer Research (MEACR) was established at Qatar University to provide a scientific platform for research and collaboration in the field of cancer in the Middle East and North Africa.

The Y-FETP participated in the 12th annual meeting of the MEACR, which was held in Casablanca, Morocco, from December 16 to 17, 2022, through two cancer researches presented by Dr. Magdi Al-Dari (graduate of the fifth cohort - advanced tier) and Dr. Robaiya Ben Obaidallah (resident in the sixth cohort - advanced tier).



Y-FETP Participates in the Three Regional Workshops and the Annual Meeting of the Field Epidemiology Training Programs' Directors Organized by EMPHNET

Despite the difficulties resulting from the war and siege, the Y-FETP is keen on the participation in regional and international workshops, as the world is in constant change and development, that obliges the programs and individuals to keep pace with it and develop themselves to comply with and respond to all changes, problems and challenges.

The importance of the workshops lies in the fact that they are an ideal occasion for exchanging experiences and building visions and integrated solutions, as well as integrating the participants and providing them with practical experience. Through the workshops, it is possible to benefit from the experiences of others and facilitate teamwork as well as stimulate the development of skills, in addition to strengthening the bonds between the participants.

During the year 2022, the EMPHNET graciously funded the participation of some of the program staff and its graduates in three workshops held by the network in Amman.

Dr. Mohammed Al Amad, the Y-FETP director assistant and senior epidemiologist, attended a workshop on the sustainability of field epidemiology programs from March 20 to 24, 2022. The workshop was also attended by representatives from Afghanistan, Bangladesh, Egypt, Iraq, Lebanon, Morocco, Pakistan, Saudi Arabia, Sudan, Tunisia, and Jordan.

The workshop aimed to support countries of the Region in developing sustainability plans for their programs, and to discuss concepts, approaches, experiences and processes for developing sustainability plans for field epidemiology training programs. On the sidelines of this session, a semi-annual meeting was held for program managers in the region, during which some future activities that EMPHNET intends to launch were discussed to serve the needs of the region and to shed more light on the activities of regional FETPs, such as the electronic library, the epidemiological bulletin, and the upcoming eighth EMPHNET conference.

Given the importance of effective mentoring and guidance, being one of the main pillars for training programs in field epidemiology, and a condition of their success, EMPHNET held a workshop on July 24-28, 2022 aimed at training trainers for mentors in the field of field epidemiology. Dr. Khaled Almoayyed (Director General of Disease Control and Surveillance, who is a graduate of the Y-FETP) and Dr. Muhammad Qairan (response coordinator in the electronic Integrated Disease Early Warning System (eIDEWS) Electronic System) participated in this workshop.

During the period from August 14-18, three of the fifth cohort graduates, Dr. Maeen Ab d u l j a l i l, Dr. Manal Mahsoun, and Dr. Sumia Alturki, in the scientific writing workshop, which aimed to provide the participants with the skills necessary to prepare their scientific papers to be publishable in the peer-reviewed journal.



Y-FETP Carried out an Exchange Visit to the Iraqi Field Epidemiology Training Program

As part of the EMPHNET commitment to its mission and strategic vision towards building regional FETP capacities, EMPHNET established the FETP Exchange Program to provide opportunities for FETPs across the region to exchange knowledge and experience.

To get acquainted with the experience of the Iraq FETP especially before launching the Intermediate tier in Yemen, Dr. Yasser Abdel-Rahim the Intermediate Tier coordinator at the Y-FETP has visited between May 27 and June 3, Iraqi FETP (I-FETP). During the visit, Dr. Yasser met with Dr. Yasir Majeed the director, and staff as well residents and graduates of I-FETP.

The visit enabled Y-FETP to gain general knowledge and experience about the activities carried out by the Iraqi FETP at all tiers, and access to training material relevant to the Intermediate program.

As part of the visit, the Yemen FETP Intermediate Coordinator also attended a leadership and management workshop for Intermediate residents.

Furthermore, the experience of the integrating I-FETP into the organizational structure of the Iraqi Ministry of Health and the procedures followed to maintain the continuity of the program were discussed.

From his side, Dr. Yasser Abdul Rahim presented the experience of the Y-FETP, in a way that contributes to benefiting from the Yemeni experience and enhances the exchange of experiences between the programs.

The visit showed with the importance of the Exchange Program to share experiences and knowledge between field epidemiology programs in the region.



Y-FETP Celebrates the World Field Epidemiology Day and the International Day of Epidemic Preparedness

In the view of the light of what the world is experiencing today in terms of the consequences and effects of the recent pandemics such COVID-19 and Mpox , that increased the burdens on all levels, not only in developing countries and the public health sector, but even in developed countries and other sectors, the TEPHINET as Global Network of Training Programs in Field Epidemiology has adopted the celebration of the International Day of Applied Epidemiology, on the seventh of September of each year. The aim is to show the urgent need for investment in field epidemiology manpower and to draw the attention towards the importance of strengthening preventive measures against epidemics.

In this context, the Ministry of Public Health and Population, represented by the General Department of Disease Control and Epidemiological Surveillance and the Y-FETP, organized an event to celebrate this day.

At the event, the Undersecretary of the Ministry of Health for the Primary Health Care Sector (PHC), Dr. Muhammad Al-Mansour, indicated the Ministry's keenness to enhance capacity-building of the human cadre in the field of epidemiology, especially in light of the war and siege that caused the spread of diseases outbreaks.

He also stressed the need to benefit from the outputs and recommendations issued by graduates when preparing field studies in the field of epidemiology and to ensure reflecting them on the ground.

For his part, the Director of the General Department of Disease Control and Surveillance, Dr. Khaled Al-Moayyed, and the Program Director, Dr. Abdul-Hakim Al-Kahlani, pointed out the importance of the International Epidemiological Day to draw attention to the field epidemiology and find specialized cadres in this field.

On the other hand, and in response to the invitation of the United Nations General Assembly to all its member states and global and regional institutions and organizations to celebrate the International Day for Epidemic Preparedness annually on December 27 of each year, the Y-FETP celebrated the International Day for Epidemic Preparedness on this occasion, stressing the importance of raising awareness and draw attention to the importance of epidemic preparedness and prevention measures, including the storage and distribution of adequate supplies of essential medicines, and vaccines as well as safe food and water, in anticipation of any potential threat that an outbreak of infectious diseases might pose.

During the celebration, the Undersecretary of the Ministry of Public Health and Population for the PHC Sector, Dr. Muhammad Al-Mansour, called on international organizations working in the health sector to carry out their responsibilities, continue to support the health system, and focus on enhancing preparedness for epidemics as an urgent priority. The events was attended by HE the Minister of Health and Population Dr. Taha Al Mutawakel and the minister advisor Dr. Ali Al Madwahi and WHO team.



Y-FETP Presents its Experience in Two Webinars Organized by the Center for Disease Control in Atlanta and EMPHNET

In appreciation of the role of the Y-FETP, the Center for Disease Control in Atlanta invited the program to present its experience in a meeting of officials of international and regional field epidemiology programs. The meeting was organized via the web on August 16, 2022.

The Y-FETP also participated in the monthly webinar organized by the EMPHNET via the web on October 18, 2022, which was devoted to reviewing the role of field epidemiology programs in improving public health.

During the two meetings, the technical advisor of the program gave a presentation in which he referred to the repercussions of the war and the siege for 7 years on the health system, the deterioration of the health situation and the spread of epidemics in Yemen. He showed the role of the Y-FETP in facing these repercussions by building the epidemiological capacities of more than 500 cadres of surveillance and disease control officials, both at both central level at the Ministry and peripheral levels in the governorates and directorates, through the three tiers of the program (advanced, intermediate, basic / Tamkeen) and through holding many training courses and short workshops.

Furthermore, he presented the participation of the program in the investigation of more than 200 outbreaks, and conducting more than 200 analyzes and evaluation of surveillance data, in addition to its participation in the preparation of guidelines for diseases, the various scientific committees and the provision of technical advice to decision makers.

He also referred to the program's keenness on scientific excellence, which emerged through presenting more than 150 abstracts in regional and international conferences, and the publication of more than 50 scientific manuscripts in peer-reviewed journals.

Finally and in recognition of the role played by the Y-FETP in promoting public health and contributing to confronting and responding to threats facing the health system, the program was awarded a certificate from the Director of the Center for Disease Control in Atlanta (CDC) for excellence in epidemiology and public health responses during the International Nights held on the sidelines of the 69th International Conference on Epidemiology (EIS), which was held in the United States on May 10-11, 2022.


Nevertheless, the presentations referred to some of the difficulties that the program faces as a result of the war and siege, and the inability of its trainees to participate in the International and regional conferences, training, and workshops, in addition to poor funding, scarcity of resources, limited mentoring capabilities, and migration of graduates to work in international organizations due to poor salaries and limited support and encouragement in public sector.

Presentation at CDC Bi-weekly Meeting
16 August 2022

Yemen Field Epidemiology Training Program (2011-2022)
[An Overview](#)

Yemen Field Epidemiology Training Program (Y-FETP)
Country Background

- Protracted war/siege is entering its eight-year with:
 - widespread economic collapse
 - over-stretched social services specially health services
- Claimed 377,000 lives, through both direct and indirect impact
- 10,200 children have been killed or injured
- 161,000 people facing extreme hunger levels
- 31,000 people currently facing famine conditions



Yemen Field Epidemiology Training Program (Y-FETP)
Training Pyramid

- Advance (2 Years)
Launched: 2011
- Intermediate (9 Months)
Launched: 2022
- Basic/PHEP (3 months)
Launched: 2017
- Community Basic EPI (2 weeks)
Still seeking funds

Figure 1. Yemeni governorates covered by Y-FETP Advance training, Yemen 2022


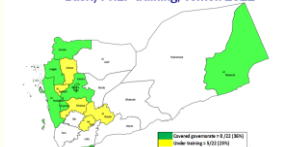


Figure 2. Yemeni governorates covered by Y-FETP Basic/PHEP training, Yemen 2022



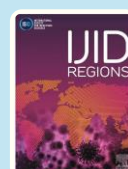
Y-FETP Publishes 12 Scientific Articles in Peer-Reviewed Journals During the Year 2022

The Y-FETP strongly believes that research and its publication are an integral part of its mission in training and qualifying in the field of field epidemiology. If the results of the such work and the achievements of the program are not published, other researchers will not appreciate the value of the work accomplished by the program and the scientific evidence it provides, nor will they be able to know these facts or continue to build on them, and thus the science of global field epidemiology cannot develop or grow.

Therefore, the program encourages its trainees to publish in regional and international peer reviewed journals, as this is the most important means of scientific communication with those interested and will contribute to the dissemination of knowledge and the use of scientific evidence to bring about changes that have an impact on public health.

In 2022, the Yemeni Field Epidemiology Training Program succeeded in publishing 12 articles in peer-reviewed journals. Some other articles are still under revision and expectantly will get published in 2023.

Al-Dar AA, Al-Qassimi M, Ezzadeen FH, Qassime M, Al Murtadha AM, Ghaleb Y.			
	Authors	Articles' title	Journal
1	Al-Dar AA, Al-Qassimi M, Ezzadeen FH, Qassime M, Al Murtadha AM, Ghaleb Y.	Diphtheria resurgence in Sada'a-Yemen, 2017-2020	BMC Infect Dis 22, 46 (2022). https://doi.org/10.1186/s12879-022-07033-x
2	Gunaid AA, Al-Radaei AN, LaPorte RE, Al-Qadasi FA, Ishak AA, Al-Serouri AA, AlKebisi TY, Bourji AA, Elshoubaki HR.	Incidence of type 1 diabetes among children and adolescents during peace and war times in Yemen	Pediatric Diabetes. 2022 May;23(3):310-9
3	Al Amad M, Almoayed K.	Influenza circulating viruses, positivity rate and risk factors for influenza associated severe acute respiratory infection during 2018/2019 winter season, Yemen	BMC Infectious Diseases. 2022 Feb 1;22(1):111.
4	Al-Qassimi MA, Al Amad M, Anam L, Almoayed K, Al-Dar A, Ezzadeen F.	Circulating vaccine derived polio virus type 1 outbreak, Saadah governorate, Yemen, 2020	BMC infectious diseases. 2022 Dec;22(1):1-1.
5	Aldaeri M, Hamid GA, Al Amad M, Ghaleb Y.	Response to Rituximab in Non-Hodgkin Lymphoma Patients at National Oncology Center, Aden, Yemen, 2017-2020: Retrospective Cohort Study.	ejpmr, 2022;9(6), 97-104.
6	Nassar AA, Al-Amad MA, Ghaleb YA	Risk factors for diphtheria in Sana'a, Yemen, 2019: a matched case-control study	IJID Regions. 2022 Mar 1;2:40-4.
7	Abou Ghayda R, Lee KH, Han YJ, Ryu S, Hong SH, Yoon S, Jeong G.H, Yang JW, Lee HJ, Lee J, Lee JY.... Al Serouri A,	The global case fatality rate of coronavirus disease 2019 by continents and national income: A meta-analysis	Journal of Medical Virology. 2022 Jun;94(6):2402-13.
8	Hubaish AM, Addeeb BM, Al-Serouri A, Mughalles S, Ghaleb Y.	The Impact of Computerized Health Information System on Medical & Administrative Decisions, Sana'a Hospitals, Yemen (2017-2020).	E-Health Telecommunication Systems and Networks. 2022 Jun 17;11(2):47-66.
9	Ali, K.A.A., Addeeb,B.M., Al-Serouri, A., Mughalles, S. and Ghaleb, Y.	The Impact of TotalQuality Management on Health Services Improvement, Sana'a Hospitals, Yemen (2017-2020).	E-Health Telecommunication Systems and Networks , 11, 109-130.
10	Park SH, Hong SH, Kim K, Lee SW, Yon DK, Jung SJ, Abdeen Z, Ibrahim Ahmed ML, Serouri AA, Al-Herz W, Subbaram K.	Non-Pharmaceutical Interventions Reduce the Incidence, and Mortality of COVID-19: A Study based on the Survey from the International COVID-19 Research Network (ICRN).	J Med Virol. 2022 Nov 29 : 10.1002/jmv.28354.
11	Ophinni Y, Frediansyah A, Sirinam S, Megawati D, Stoian AM, Enitan SS, Akele RY, Sah R, Pongpirul K, Abdeen Z, Aghayeva S... Serouri AA	Monkeypox: Immune response, vaccination and preventive efforts.	Narra J. 2022 Dec 14;2(3).
12	Amiri M, Al Nsour M, Alonso-Garbayo A, Al Serouri A, Maiteh A, Badr E.	Health System Resilience in the Eastern Mediterranean Region: Perspective on the Recent Lessons Learned.	Interactive Journal of Medical Research. 2022 Dec 21;11(2):e41144.





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