

Webinar Brief

COVID-19 and the Health Workforce: Implications for Public Health Capacity

January 12, 2021

Webinar Brief

Introduction

The COVID-19 pandemic continues to pose a challenge on every aspect of life as we know it ever since it was declared a pandemic by the WHO in March 2020. Countries around the world remain critically challenged with the continuous rise in the number of cases and hospitalizations as a result of the rapidly spreading nature of the disease.¹ Mostly affected are healthcare provision issues and healthcare workers themselves.¹

The effect of the COVID-19 pandemic on basic health services is a source of serious concern. In a WHO study, it is stated that the primary finding reveals that health services in many countries have been partially or entirely disrupted.² Increased workload and a high demanding working atmosphere have resulted in long working hours, psychological distress, exhaustion, and often even physical and psychological abuse. Health workers are often at risk of being infected and even losing their lives and are maybe fearful of passing the infection on to their families.¹

COVID 19 has also brought focus on the public health capacity dimension of the health workforce. The Global Health Security Index study indicates that no country is adequately prepared for epidemics or pandemics. It concluded that international readiness is weak.³ Many countries do not demonstrate the health protection skills and capabilities required to prevent and respond to major outbreaks of infectious diseases.³ Despite its importance, the health workforce's public health capacity dimension is not adequately covered in the

discussions around COVID 19 in the context of the Eastern Mediterranean Region. In the region, most of the countries are already facing an overall shortage of healthcare workers, with weak competencies, geographical maldistribution, and a shortage of specialized health workers.¹ These limitations are now further exposed by the pandemic and its associated requirement for robust public health interventions.¹ In Jordan, the COVID-19 crisis has demonstrated the need and willingness of policy-making agencies and ministries to implement multiple effective initiatives, procedures, and policies that have been met with broad support, as evidenced by the private and governmental institutions' opinion surveys.⁴

A long-standing observation has been that the public health workforce is in jeopardy, and the wider health workforce generally lacks adequate public health competence. It is strongly recommended to implement strategies to make sure that public health workers who are involved in providing essential public health services demonstrate knowledge of the key competencies of public health that are necessary for their jobs.⁵ A wide range of professionals are designing, implementing, and managing effective public health interventions. Respectively, these professionals work in an environment that is greatly influenced by public policy, which in turn is influenced by the interests and concerns of the economy, politics, business, as well as communities.⁶

About EMPHNET

¹ WHO. WHO interim guidance note: Health workforce response to the COVID-19 pandemic. World Health Organization. <https://who.int/iris/bitstream/handle/10665/331949/WHOEMCSR280E-eng.pdf?sequence=1&isAllowed=y>.

² WHO. Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August 2020. World Health Organization. https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS_continuity-survey-2020.1. Published 2020. Accessed December 11, 2020.

³ GHS Index. Inaugural Global Health Security Index Finds No Country Is Prepared for Epidemics or Pandemics <https://www.ghsindex.org/news/inaugural-global-health-security-index-finds-no-country-is-prepared-for-epidemics-or-pandemics/>.

⁴ Al Qutob R, Ajlouni M, Abufaraj M, Moonesar I. Viewpoint: Jordan's Public and Surveillance Health Policies: During and After COVID-19. *Jordan Journal of Pharmaceutical Sciences*. 2020;13(3).

⁵ Alqutob R, Al Nsour M, Tarawneh M et al. COVID-19 Crisis in Jordan: Response, Scenarios, Strategies, and Recommendations. *JMIR Public Health Surveill*. 2020;6(3):e19332. doi:10.2196/19332

⁶ Hernandez L, Munthali A. *Training Physicians For Public Health Careers*. Washington, DC: National Academies Press; 2007.

EMPHNET is a regional network that was founded in 2009 with the focus on strengthening Public Health Systems in the Eastern Mediterranean Region (EMR). EMPHNET works in partnership with Ministries of Health, non-government organizations, international agencies, private sector, and other public health institutions in the region and globally to promote public health and applied epidemiology. In 2015, EMPHNET created Global Health Development (GHD) as a regional initiative to advance its work in the EMR and support countries strengthen their health systems to respond to public health challenges and threats.

Webinar Specifics

Globally, there is a greater respect for the vital role that the public health practitioners play in protecting our community. The magnitude and severity of the pandemic have proven that for public health preparedness is a crucial component. It requires proper preparation and coordination by different health authorities. In order to achieve so, the health workforce gaps and challenges concerning public health competence need to be addressed in both the long term and the short term. Such information is important to understand how a country can build a robust public health infrastructure and to maintain its ability to respond to this pandemic and future outbreaks.

Webinar Objectives

This Webinar was conducted with the following objectives:

- To clarify the health workforce gaps and challenges concerning public health competence.
- To Provide a review of the current situation, issues, and challenges related to the health workforce.
- To Propose relevant recommendations to address the gaps and challenges.

Webinar Speakers

The Webinar hosted the following expert speakers:

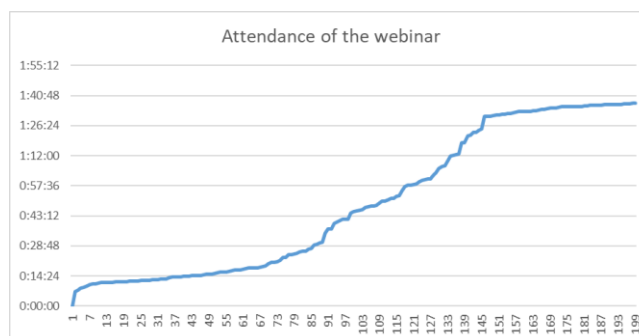
- Dr. Elsheikh Badr Health Workforce Consultant, Chairperson of the Community Medicine Council of the Arab Board for Health Specialties, and Policy Development Expert with the National Qualifications Authority of the UAE
- Dr. Scott JN McNabb Research Professor at Emory University, Rollins School of Public Health Managing Partner at Public Health Practice, LLC
- Dr. Julien Goodman Director, Agency for Public Health Education Accreditation (APHEA), Brussels
- Dr. Fethiye Gülin Gedik Coordinator, Health Workforce Development at the World health organization (WHO) Regional Office for the Eastern Mediterranean.

The webinar was facilitated by:

- Dr. Mohannad Al Nsour, MD, MPH, PhD, Executive Director, EMPHNET. A member of the Royal colleges of Physicians of the United Kingdom. Expert in field epidemiology, operational research, and public health systems.
- Dr. Amr Salama Secretary General of the Association of Arab Universities.

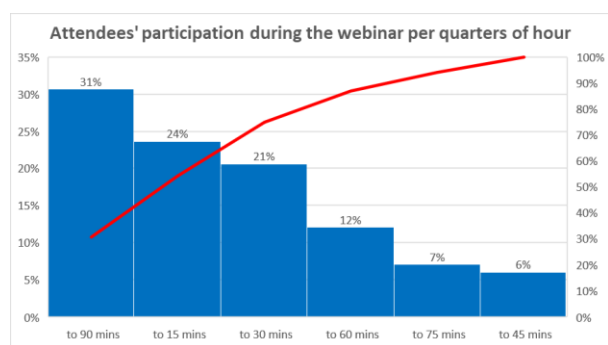
Webinar Attendees

Registration was open one week before the webinar and was announced through EMPHNET's and ArU communication and networking channels. In total, 310 attended the webinar. Most of the participants (85%) attend the full webinar. The average time of



attendance was 64 minutes, figure 1.

The Preto chart as in Figure 2, shows that participants shared about 200 comments and 30 questions. Their responses are presented over the quarters of hour. The participants were most active in between 75 to 90 minutes of the webinar (31% of the comments and questions), this is followed by the first 15 minutes' period and 15 to 30 minutes' periods. They were least active between the 30 to 45 minutes' periods.



Overview of Presentations

The webinar was conducted in English and included four 10-minute presentations on different aspects and issues related to the impact of COVID-19 on public health capacity. The first presentation described the role of WHO EMRO in strengthening the health workforce through a public health approach. The second presentation identified the gap between the health workforce and public health. The third presentation described the approach in changing curricular content and community outreach in the COVID19 era. finally, the fourth presentation discussed the public health situation, challenges, and prospects in the medical curriculum. A discussion session followed the presentations centered around important and relevant questions received from the attendees.

Following is a brief of these presentations in the order that they were presented. The webinar started and ended at the scheduled time, with a duration of 1.5 hours.

Webinar Introduction

Dr. Mohannad started the webinar by welcoming the webinar audience then presenting brief bios of himself and the second facilitator, Dr. Amr Salama. He continued by presenting the health workforce challenges and policy issues around the world and the weakness of the international

preparedness for epidemic or pandemics. Finally, Dr. Mohannad concluded the importance of strengthening national and global health workforces as part of the overall approach to advance universal health coverage and expanding public health capability.

Next was Dr. Amr Salama, he began by greeting the webinar audience, and by expressing his gratitude for organizing the webinar jointly with EMPHNET. He continued by presenting brief statements about EMPHNET's roles in achieving better health for the individuals in the Eastern Mediterranean Region (EMR), in managing the Field Epidemiology Training Program (FETP) in the region, and its current contribution to the management of the current COVID-19 pandemic. In addition, he stated that they in the Association of Arab Universities realized the importance of the challenges of the workforce in our region and this importance has been well highlighted during the current COVID-19 pandemic. Finally, he emphasized the importance of their contribution to enriching the discussion and providing practical recommendations for strengthening health systems, especially the health workforce. Dr. Amr presented the objectives of the webinar and invited Dr. Mohannad to introduce the speakers.

“Strengthening the health workforce through a public health approach: what is the role of WHO EMRO?”

Dr. Fethiye Gülin Gedik

In her talk, Dr. Gedik appreciated organizing this event as it is the first webinar on health workforce regionally and globally and it links well to the international year of health and care workers. Dr. Gedik highlighted the important roles and invaluable services provided by the health workers, in all specialties, in managing COVID-19 pandemic. She mentioned that those health workers have been working under high-risk environment. There is no accurate data on the infected healthcare workers, however, different studies estimated that between 2% to 30% got infected, with most cases among nurses and female health workers. She recommended to implement infection, prevention, and control measures in health facilities, provide personal

protective equipment with an adequate training on their use, put in place surveillance and monitoring mechanisms for infection among health workers, and introduce audit mechanism to regularly check those measures. In addition, there is a need for reassigning high-risk workers to flexible working duties to minimize their risk.

Health care workers are subject to stressful conditions, said Dr. Gulin, with about 30-50% of health workers reported different levels of psychosocial distress. The sharp increase in the number of COVID-19 patients, long working hours, fear of infection, being the only one with the patients, stigma, and being away from home and families, enhance their stress. Those factors led to psychosocial stress, fatigue, occupational burnout, and physical and psychological violence. She recommended that mental health support must be highlighted as an important aspect. An important component to reduce anxiety and keep the health workforce updated is the communication and training, using the appropriate technology.

Mobilizing health workforce has been insufficient. Dr. Gedik mentioned that the health workers should have technical guidance, access to new and correct information, especially in the presence of info-demic, and they need to be able to work in a conducive working environment. WHO and WHO EMRO developed various tools for the health workforce to guide the response of COVID-19. Countries have addressed those mobilization challenges using approaches such as reassigning health workers, repurposing, mobilizing inactive staff, retired ones, mobilizing students, volunteers, or involving community health workers. Dr. Gedik has identified the anticipated extra workload on health workforce and their capacity to provide and roll-out the COVID-19 vaccination, especially in low-income countries.

The health professional education was also disrupted, although most institutions managed to continue online education, challenges remained with clinical, practical training and assessments. COVID-19 pandemic taught us that we will need more public health professionals with greater knowledge and better understanding of public health principles, teamwork, health systems,

leadership skills, and ability for engaging with communities. Also, we need to develop strategies and plans for health professional education, using hybrid educational approaches and adjusted curriculum content to meet the new requirements. To complement this professional approach, revisiting the education regulations and infrastructure is a must.

Policies and resources are recommended for the compensation of health workers and to acknowledge their contributions. Examples are incentives, special access to testing, supporting measures during isolation or quarantine, free treatment, and compensation in case of severe illness. This is to motivate health workers and keep them in the service. Dr. Gedik concluded her presentation with the motto of the world patient safety day this year “keep health workers safe, keep patients safe”.

“Public health and the health workforce: what is missing?”

Dr. Elsheikh Badr

Dr. Elsheikh has started his presentation by stating that COVID-19 has proven how health workforce are important and critical. Also, the health workforce is fundamental for health systems and they are key in realizing universal health coverage and the sustainable development goals. He clarified that the definitions of “health workforce” got confused with the term “public health workforce”, which has a wider scope and better describes all those who are specialized in public health and consider it as their discipline. Dr. Elsheikh presented the framework of public health workforce which has four domains: education, practice, research, and networking.

Dr. Badr mentioned that public health education is undermined in medical curricula, with no clearly identified competency framework. The main missing competencies are technical skills, social and political skills, leadership, analytical thinking, and system thinking. This underestimation of the public health extends to the public who prefer the clinical specialties over

it. Unlike other clinical professions, public health education is mostly dominated by academic teaching over the professional training. He stressed on the importance of maintaining the quality and accreditation of public health education. Dr. Elsheikh encouraged the expansion in the Continuous Professional Development (CPD) for public health workforce.

Dr. Elsheikh pointed out that public health practice in the EMR is seen as a second-class profession. This may explain why guidelines and protocols are lacked for public health practice like when dealing with emergencies. In addition, the career trajectories and prospects in public health professions are not clear. The situation is not better for the third domain. Quality research is largely lacking with limited publication and dissemination in the region. The reasons could be insufficient human capacity, limited funding, and challenges with methodologies like qualitative research. The latter could be explained by the fact that most of public health researchers have medical background while public health is related to social sciences. Dr. Badr mentioned that the evidence generated by research is not influencing policy and decision making in the region. The speaker shared that despite rising potential, still there are no strong national public health associations in our region, with only five countries in the Arab region have national public health association. Beside the efforts of WHO, some regional initiatives have been started like the ArPHA. The region lacks database or repository of public health experts.

Dr. Elsheikh summarized the health workforce challenge in a triad of quantity, quality, and relevance. Those challenges were well revealed by the COVID-19 pandemic, when the health system encountered the inadequacy of health workers, lack of core competencies, and the low resilience of workers. The speaker shared some recommendations to overcome the discussed

challenges. He highlighted the importance of developing regional competency framework that can guide and revitalize public health curricula. He encouraged providing more professional rather than academic degrees. He referred to the example of the new public health academy that is based on professional training. Dr. Badr recommended the development of protocols and guidelines for public health practice. Furthermore, he invited to better the marketing of public health to attract the younger generations. In terms of public health research, Dr. Elsheikh advised to build the capacity in terms of methodologies, agenda and priorities, innovative funding for research and publications, and enhancing public health journals in the region. He supported the promotion of national public health associations and development of regional public health networks and linking them to global platforms. He referred to EMPHNET as a successful example of such networks.

“COVID19: Changes in Curricular Content and Approaches”

Dr. Julien Goodman

Dr. Julien presentation looked into the changes in education, research, and services with COVID-19. He highlighted the challenges imposed by COVID-related restrictions on education as well as public health on frontline responders. The lockdown limited access to learning resources. Thus, some strategies that include more electronic based access, were introduced to facilitate the education process as well as supportive services like libraries. As well as what is missing is the sustainability of those services and the care provided to the students such as personal and career tutoring.

Among the limitations related to online education is teaching international students, the lack of experience with electronics and technology, time difference, poorly structured online sessions, and bandwidth which affects the equity of education. Some of the suggested approaches to tackle those challenges could be provide technical support and pedagogical support

to the students and instructors, adopt the blended approach, and consider asynchronous learning where we can provide recorded lectures and materials.

The other challenge is related to the fact many of the public health students and instructors are part of the frontline work and service. With presence of rigid education system, they find it difficult to arrange for their education as well as the services they provided. The need is for the adoption of more flexible systems. As COVID-19 became a center of focus, the curricula could be biased towards certain competencies like epidemiology and health promotion. On the other hand, research has been integrated in innovative ways through adapting research from other areas like math, social science, and logistics. Similarly, some community outreach examples could be seen where education is linked to service like when students provide their feedback and assessment to improve the health systems and the National Public Health strategies.

As a result of COVID-19 pandemic, said Dr. Goodman, the E-learning has been pushed to the forefront. However, he advised to keep the balance and not to rush to completely convert to E-learning to avoid risks like the high drop out. Such balance needs the adoption of the blended approach and to reach to those who are in need, in their regions.

Dr. Julien wrapped up the session by stating that electronic learning is going to stay with continuous changes and adaptation. He also derived attention to the potential risks of depending completely on the online learning including technological risks and risks on the school financing. Dr. Julien stressed on the importance of professional training and education that target the national priorities and health problems. In addition, other skills must be considered like media and information management. Dr. Julien expects that public health will become more popular and known to people as a discipline and will get more attention and promotion.

“Modernizing Global Health Security through Healthcare and Public Health Workforce Development”

Dr. Scott McNabb

Dr. Scott stressed on the fact that the COVID-19 pandemic is shedding light on the gaps in public health and now we must study those gaps and think about how to repair them. He mentioned that scaling essential health interventions to achieve health development targets is constrained by a lack of skilled health professionals to deliver those services. He encouraged to consider those left behind the spectacular advances in health worldwide to ensure the equitable sharing of health progress, including access to information. The current gap in public health workforce is estimated to be around 15 million persons shortage of health professionals in the global community by 2030.

In order to address this gap, Dr. Scott advised to go beyond the traditional approaches of education and training. Despite the expansion in using online teaching, they are still primitive, and the challenge is how to make it effective, sustained, and meeting the needs of learners for updated knowledge and skills. The speaker highlighted the importance of seeing the pandemic as an opportunity to work on a new innovative model of both academic and in-service training. He referred to Harvard experience with using technology to transform products and services to be more affordable and accessible. E-learning could be designed to be more cost-effective, of quality, has a wider coverage, and flexible. He recommended to expand in micro learning for specialized training, increased emphasis on online content development, and blended learning, with consideration of trainees' individual needs. To ensure the acceptance and success of the new approaches, Dr. Scott advised to understand and consider the customer obsession, the service must be human friendly that requires minimum steps, disciplinary collaboration, efficient organizational structure, and competent monitoring and evaluation approach.

Dr. Scott referred to the example of the Institute for Workforce Development with Africa CDCs

to increase the quality and quantity of African professionals in epidemiology, laboratory, and public health informatics, with four courses hosted in 2019, for 103 epidemiologists from all over the Africa, many of them working and the Ebola crisis.

In his closing remarks, Dr. Scott recommended look for the future of public health to scale impact, ensure sustainable growth, adapt to changing needs, using new tools and methods, like flipped classes, and build the research skills.

Closing remarks and key messages

Dr. Mohannad Al Nsour

Dr. Mohannad thanked the esteemed speakers, facilitator and audience and wrapped up this webinar by the following key messages:

Among the important issues that have been discussed are:

- Many countries do not demonstrate the health protection skills and capabilities required to prevent and respond to major outbreaks of infectious diseases.
- Despite its importance, the health workforce's public health capacity dimension is not adequately covered in the discussions around COVID 19 in the context of the Eastern Mediterranean Region.
- In the region, most of the countries are already facing an overall shortage of healthcare workers, with weak competencies, geographical maldistribution, and a shortage of specialized health workers. These limitations are now further exposed by the pandemic and its associated requirement for robust public health interventions.

Below are the main recommendations to address the workforce challenges in the context of COVID-19:

Discussion

Dr Mohannad Al Nsour facilitated the Q&A session. Below are some selected questions that were answered by the relevant speakers:

- Update the health policy to prioritize the issues of the health workforce and tackle the encountered challenges, as well as to ensure health workforce retention.
- Implement strategies to make sure that public health workers who are involved in providing essential public health services demonstrate knowledge of the key competencies of public health that are necessary.
- Mainstream the workforce component in all the national and international strategies, initiatives, programs, and projects.
- Enforcing laws and regulations to ensure the safety of the health workers as well as improving the work environment and facilities.
- Building strategic partnerships for countries striving to strengthen their health workforce and health systems in the spirit of improving public health
- Encourage the shift in paradigm to ensure professional training and competency-based learning. (This can be ensured by updating the curricula and adopting innovative approaches like the residency-based models for public health training and teaching.)
- The synergy between public health schools and health services is crucial for achieving the desired outcomes in terms of a competent health workforce.

At this point, Dr. Amr thanked all participants for their proactive participation and rich discussion, then he stated that he is looking forward to seeing these recommendations implemented in practice. Finally, he assured the participants that they would continue to convene such seminars and scientific conferences to discuss various topics of interest to our region in various fields.

Some Questions Asked During the Webinar

Q: How do we use online technologies to bridge the gap between academia, supply, and demand?

A: *Dr. Scott.* Yes, surely, one way is through blended learning. Also, this gap can be bridged through collaboration between universities and service providers/professions.

Q: What strategies are recommended for decision makers to improve public, private, partnership or dialog in the light of strengthening public health workforce investment based on COVID-19?

A: *Dr. Gullin.* This is needed not only for public health workforce, but in general, because the share of the private sector in the region in health in service delivery and education is increasing. Therefore, it is becoming an important resource to tap in, to improve the health of health outcomes. We have regional frameworks for public private partnership, and which was adopted by the regional committee two years ago, and we are promoting that. Also, we are working with countries facilitate policy dialogues between the public and private sector and incorporating all stakeholders. So, there are several aspects, we need to be very careful about if we are having so much share with the private sector, how we ensure the quality so regulatory frameworks regulation of health workforce, in terms of both practice and education is critical in our region. The countries that have regulation, need to enforce those regulations and updated them. We need also to consider the labor market as there is a close link between education market and labor markets. So, I think that the education design and provision should come from the demand of the labor market

Q: How do you see the future of the governance role of the global initiatives and bodies, in handling pandemics?

A: *Dr. Sheikh.* That's a difficult question. I think despite the recognition of the important partners, who have a stake in the health arena, like public, private, NGOs, and others, but the fact remains that the government should demonstrate leadership and facilitation should come from the side of government. That's why I think, at the epics of the health system, governments, represented by ministers of hospitals and health system leadership should be promoting and facilitating dialogue among different partners, including the private sector and others, and the collective movement of stakeholders is actually fundamental for success.

Q: what are the missing competencies and public health workforce revealed by the pandemic? How do you see the missing competencies? I think that comes back to the stakeholder issue doesn't have that?

A: *Dr. Julian.* I think that has to be made by the stakeholder, it wouldn't be for an organization, because it has to reflect the inputs from everybody who is dealing with public health education and professional training.

Biographies of Guest Speakers and Facilitators

Dr. ElSheikh Badr, Health Workforce Consultant, Chairperson of the Community Medicine Council of the Arab Board for Health Specialties, and Policy Development Expert with the National Qualifications Authority of the UAE.

Dr. ElSheikh Badr is a Health Workforce Consultant with expertise in health and human recourse development. With over 15 years of service in the Federal Ministry of Health in senior positions, he now serves as the Secretary General for Sudan Medial Specializations Board. Prior to that, Dr. Badr Contributed to academia by teaching and supervising both undergraduate and postgraduate medical students at the Academy of Health Sciences. He also served as a founding Editor of the Sudanese Journal of Public Health, Moreover, Dr. Badr also took on the post of World Health Organization (WHO)

health workforce consultant. Furthermore, Dr. Badr was also recently appointed as member of the WHO global Expert Advisory Group (EAG).

Speaker: Dr. Fethiye Gülin Gedik,

Coordinator, Health Workforce Development at the WHO Regional Office for the Eastern Mediterranean.

Dr. Fethiye Gülin Gedik is a physician with postgraduate training in public health and health economics. Currently the Coordinator in the Health Workforce Development in the WHO regional office for the Eastern Mediterranean Region, Dr. Gedik started her career in the WHO's Regional Office for Europe as a Resident Adviser supporting health care reform. She later undertook the responsibility for the health care policies and systems in Central Asian Republics.

Dr. Gedik has had a 25-year long journey in areas of health policies, and system and human resources for health at national and international levels.

Speaker: Dr. Scott McNabb,

Research Professor, Emory University, Rollins School of Public Health, and Managing Partner, Public Health Practice, LLC.

Dr. Scott McNabb is a research professor at Emory University, Rollins School of Public Health, and the director of the King Abdullah Fellowship Program. Before joining the U.S. CDC Epidemic Intelligence Service (EIS) and serving the 2-year EIS residency in New Orleans, LA, Dr. McNabb worked for 13 years at the Oklahoma State Health Department. Most of his professional efforts focused on serving those in underdeveloped, underserved global settings. Promoted to Distinguished Consultant and nominated for the CDC Charles C. Shepard Award, he completed the Senior Executive Services (SES) candidate development program and is certified by the Office of Personnel Management. From 2006 – 2008, he directed the Division of Integrated Surveillance Systems and Services, National Center for Public Health Informatics, CDC. Before retirement from CDC, he was Associate Director for Science; Public Health Informatics and Technology Program Office; Office for Surveillance, Epidemiology, and Laboratory Services

Speaker:

Dr. Julien Goodman, *Director, Agency for Public Health Education Accreditation (APHEA).*

Facilitator: Dr. Amr Salama,

Secretary-General of the Association of Arab Universities

Dr. Amr Salama is the Secretary-General of the Association of Arab Universities, as well as a Professor of Structural Engineering at the Helwan University, Egypt. In his career, Dr. Salama was the counselor of The American University of Cairo (AUC), acting as a focal point between the Egyptian Authorities and AUC Administration. Dr. Amr is also the former Minister of Higher Education in Egypt.

Facilitator: Dr. Mohannad Al-Nsour MD, MPH, PhD – *Executive Director GHD/EMPHNET*

Dr. Al-Nsour is an internationally recognized expert in field epidemiology, research and public health systems. Dr. Al-Nsour has a PhD from the Glasgow University, Scotland, U.K., where he was a fellow with the International Agency for Research on Cancer (IARC). Dr. Mohannad Al-Nsour holds a Medical Degree from Ukraine and an MSc in Epidemiology from the American University of Beirut (AUB). Since 1999, Dr. Al-Nsour assumed several positions as a researcher, advisor, and director in Jordan. He also served as a consultant on several assignments with the US Centers for Disease Control and Prevention (CDC), the World Health Organization and the AUB. Before becoming EMPHNET's Executive Director, Dr. Al-Nsour was the Director of the Field Epidemiology Training Program (FETP) in Jordan (2006 -2009) and the Head of Surveillance Department of Balqa Health Directorate – Jordan. Dr. Al-Nsour also served as a CDC consultant for FETPs in the Eastern Mediterranean Region.