

Webinar Brief

September 15, 2020

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Impact of COVID-19 on Polio Eradication, and Other VPDs Elimination and Control Efforts

Introduction

The COVID-19 pandemic negatively affected health systems, and particularly immunization systems globally. According to a UNICEF report, at least 80 million children under the age of one are at risk of contracting VPD, particularly polio. According to data collected by the WHO, UNICEF, Gavi, and the Sabin Vaccine Institute, the provision of routine immunization services is substantially hindered in at least 68 countries, and this affects millions of children under the age of one living there.

Wild Polio Virus (WPV) and Circulating vaccine-derived poliovirus (cVDPV) transmission is primarily detected by surveillance for acute flaccid paralysis (AFP) among children aged <15 years of age and confirmed by stool specimen testing in WHO-accredited laboratories within the Global Polio Laboratory Network. But, this system was disrupted by the COVID-19 pandemic. Due to total lockdown, the focus is on only acute cases and emergencies. The limited public transport makes it challenging for caregivers to visit health facilities and health workers. Some countries put the immunization services on hold for a period of time. Even polio campaigns were on hold up to the month of July in two polio-endemic countries (Afghanistan and Pakistan).

Between January 2019 and March 2020 cVDPV transmission was confirmed in 26 countries including EMRO countries. Since March 2020, the number of polio and cVDPV cases are increasing and most of them are in the EMRO region. Considering the above-mentioned facts, the actual number of cases may be higher than the reported cases, thus making cVDPV a greater public health concern than WPV.

About EMPHNET

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 to strengthen their health systems to respond to public health challenges and threats.

Webinar Specifics

This Webinar provides a convening platform of expertise at the global, regional, and country levels for knowledge exchange towards addressing the impact of COVID-19 on Polio Eradication and other VPDs elimination and control efforts. It aims to identify strategies to enhance immunization service and step-up towards elimination and eradication of VPDs within the context of COVID-19 and the post-pandemic phase.

Webinar Objectives

This webinar was conducted with the following objectives:

- To highlight the impact of COVID-19 on the VPDs with the focus on polio eradication and other VPDs Elimination/Control.
- To identify the main challenges of immunization at the global, regional, and country-level in the context of COVID-19.
- To discuss appropriate strategies to revitalize and scale-up the immunization programs during the COVID-19 pandemic.

- To propose applicable, sustainable, and innovative solutions toward Polio Eradication and other VPDs eliminations.

Webinar Speakers

Seeking to bring expert opinions and experiences at the global, regional, and country levels, and in order to create a space for exchanging ideas and experiences geared towards addressing the impact of COVID-19 on Polio Eradication and other VPDs elimination and control efforts. The Webinar hosted the following experts:

Dr. Jeffrey McFarland, Medical Epidemiologist, Measles Elimination Team Lead Global Immunization Division at US Center for Disease Control and Prevention (CDC).

Dr. Muhammad Obaid ul Islam, Surveillance Expert, Member of the Global Surveillance Task Team, Cessation Risk Team and nOPV2 working group from the EMR.

Dr. Ezzeddine Mohsni, Public Health Expert and Member of Strategic Advisory Group of Experts (SAGE).

Dr. Mawahib Jubarah, Sudan National EPI Manager and Associated professor at Nile University Sudan.

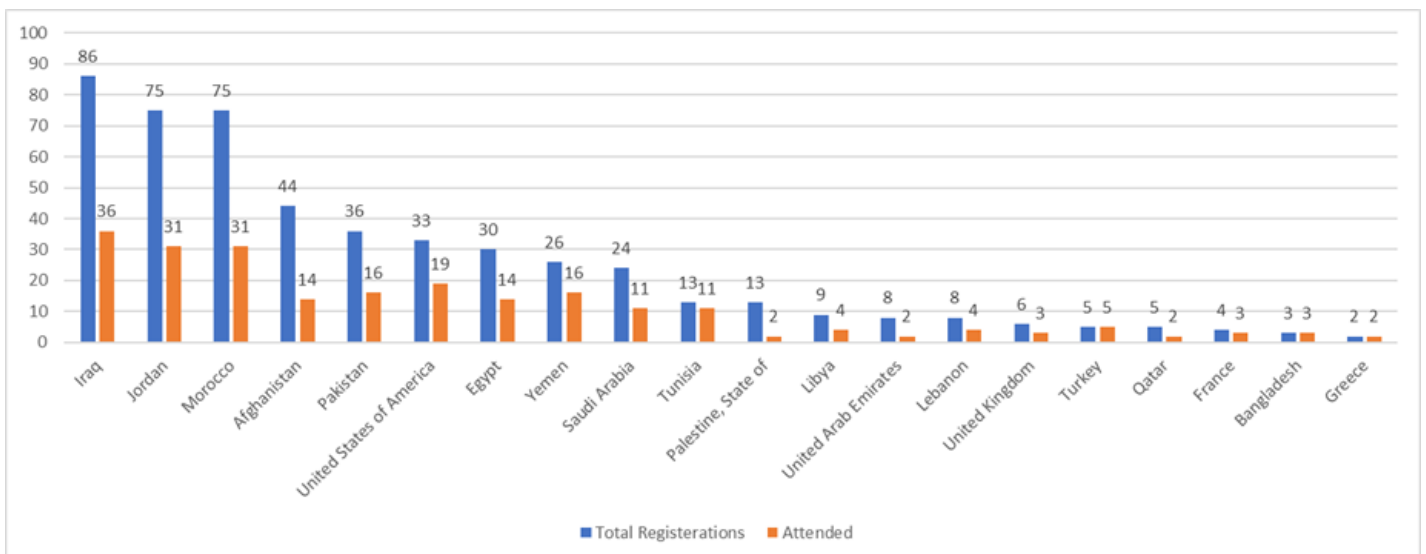
The webinar was facilitated by **Prof. Hyam Nicola Bashour**, Public Health Expert, Ex-SAGE Co-Chair. The Current Chair of WHO EMRO Regional Verification Commission for Measles and Rubella Elimination.

Webinar Attendees

Registration was open one week prior to the webinar and was announced through EMPHNET's communication and networking channels. In total, 413 registered to attend, 53% (n= 218) attended the webinar. The below graph displays the distribution of registered individuals and attendees by countries.

Overview of Presentations

The webinar was conducted in English and included four presentations (20 minutes for the first two and 10 minutes for the last two). The presentations covered different aspects and issues related to VPDs elimination and eradication with the focus on polio eradication. Speakers presented the current and planned efforts of global partners to support country efforts in mitigating COVID-19 risks and accelerating the routine immunization and supplementary immunization activities (SIA) activities. A discussion session followed the presentations which centered around important and relevant questions received from the attendees. The following is a summary of these presentations in the order in which they were presented. The webinar started and ended on the scheduled time, with a duration of 1.5 hours.



Webinar Introduction

Prof. Hyam Nicola Bashour

Prof. Hyam Nicola Bashour provided a brief introduction about COVID-19 and the impact it has on the immunization system. She introduced the webinar topic, and she talked about the immunization coverage, and common challenges faced during the COVID-19 era. She then welcomed the webinar audience and presented brief bios of the guest speakers.

Global Impact of COVID-19 on Polio, Measles, and other Vaccine-Preventable Diseases

Dr. Jeffrey W McFarland, MD

Dr. Jeffrey presented the Global statistics of COVID-19 as of 13 September 2020. According to the numbers he presented, a total of 28,584,158 confirmed cases and 916,955 deaths were recorded until that date. He stressed that it is important to analyze the data and assess the health systems' performance in various countries without being critical. He also presented the situation by WHO regions which revealed that America had the highest burden (14,699,174) of confirmed cases, followed by South-East Asia, Europe, the Eastern Mediterranean Region, Africa, and Western Pacific Region respectively. Dr. Jeffrey talked about the importance of maintaining essential health services (operational guidance for the COVID-19 context). He also highlighted the countries with national health service packages and government funding by income group, thus showing that 70% of additional government funding was allocated for maintaining essential health services during the COVID-19 era, among the high and upper-middle-income countries. This same figure was recorded to be 41% to 42% among the low income and lower-middle-income countries. Dr. Jeffrey mentioned that during the pandemic around 23% of the countries reported the disruption of the health services and this percentage was 45% among the low-income countries. He also mentioned the approaches to overcome disruption such as training, telemedicine, task shifting, novel supply chain, community outreach, and alternative health care facilities to reduce the number of patients.

Dr. Jeffrey presented the SIA activities in the context of COVID-19. These activities are carried out in three phases. The first phase is the emergency phases (March to June 2020) in which all the SIA activities were halted, while the second phase involved SIA resumption in outbreak and WPV endemic countries, and finally, the third phase was the post-pandemic phase which involves a long-term revision to the endgame strategy 2019-2023. He also mentioned that as a result of COVID-19 WPR, SEAR, EMR case detection is decreased, almost half of ES decreased in SEAR and EMR countries, while disruption of shipment in AFR and all 21 high-risk counties are impacted. He further stated that GPEI capacities such as HR, logistical, and labs are fully mobilized to support COVID-19. Despite all these challenges, there are some opportunities to take advantage of for the benefit of the program. Such opportunities include the use of the pause for reviewing the planning mechanism, benefiting from the global discourse on COVID-19 for the importance of vaccination, and the maintaining of momentum to integrate approaches (GPEI+RI+ essential services).

Regarding Measles surveillance, Dr. Jeffrey mentioned that.

1:Decreasing the number of measles cases might be due to the high number of cases in 2019 and the decreasing trend seen in 2020.

2:Variability in results by country and the difficulty to interpret results by region.

3:Most of the countries had <2 cases per 100,000 during the past few years and low sensitivity of measles surveillance might be a result of weakness in measles surveillance systems in general and not necessarily related to COVID-19.

4: A decrease in cases could be related to COVID-19 mitigation measures.

5: In summary, a variety of factors could affect the decrease in measles cases, and it is difficult to determine the impact of COVID-19 on non-measles discard rate (A variety of factors could affect the rates).

Impact of COVID-19 on Polio Eradication and Other VPD Elimination and Control Efforts

Dr. Muhammad Obaid ul Islam

Dr. Obaid presented the COVID-19 situation in the EMR. He mentioned that all 22 countries are continuously reporting COVID-19 cases, and as of September 13, 2020, a total of 2,020,815 cases and 53,332 associated deaths were reported regionally. The SIA program has been in the emergency phase since the end of February / early March. This was the same timeframe in which the pandemic saw a significant rise in the number of cases and infected countries. At that point, all SIAs were stopped. However, critical functions like surveillance were maintained. As a result of the pause in SIAs, 60 million vaccination opportunities were lost, thus affecting 50 million children. The program is now in the resumption phase where SIAs resumption planning is and will remain in focus over the next few weeks to months. Importantly, these pandemic phases are expected to transition back and forth, from country to country and even sub-nationally. The reality is that the program has to co-exist and, in turn, adjust with the COVID-19 pandemic for quite some time. This entails adjusting the program strategies at all levels. While the disease trajectory is plateauing or declining for now in the European region, in some other areas the situation is worsening. These areas encompass key EMR and AFR countries, including the endemic countries and some of the outbreak countries as well.

Dr. Obaid presented WPV endemic circulation in Afghanistan and Pakistan. Likewise, cVDPV outbreaks are reported from Afghanistan, Pakistan, Somalia, and Sudan also cVDPV1 are reported from Yemen. He also mentioned that all the SIAs including mOPV2 SNID are synchronized between Afghanistan and Pakistan.

Consequences of COVID-19 on Immunization Program

Dr. Mawahib Slman Jubarah

Dr. Mawahib presented the country profile for Sudan and the increased risk of polio (VDPV) and other VPD during the COVID-19 pandemic, and success stories. The country coverage was decreased by increasing the

COVID-19 cases in April and in June with the coverage slightly improving. A total of 19 cVDPV cases and 6 environmental samples were reported by the country. The detection of this outbreak was delayed for four months, so this delay increases the risk of polio and other VPD outbreaks. The VPD reporting is also negatively affected by COVID-19 low reporting rates due to the reduction of sentinel sites, suspension of some type of samples, delay in transportation of the samples, delay in testing as all the labs, and lab staff are busy responding to the COVID-19 pandemic. The major actions taken by the country include demand creation with the focus on interpersonal communication (IPC) to strengthen the immunization program in Sudan and to avoid any further outbreak.

Closing Remarks and Key Messages

Prof. Hyam Nicola Bashour

Prof. Hyam thanked the esteemed speakers, and audience and wrapped up this webinar with the following key messages:

- Immunization is one of the most effective public health interventions and it should not be disrupted under any emergencies. And IPC is one of the most effective interventions to increase demand for immunization.
- The provisions of standard immunization services should be continued and supported by an efficient supply chain for quality, comprehensive, and sustainable immunization services delivery.
- Countries must respond to COVID-19 while continuing to build stronger immunization systems to reduce the risk of VPDs outbreaks.
- It is essential to invest more in routine immunization and SIAs, epidemiological surveillance, data management, and EPI related research.
- There is a need to adopt an informed decision-making process with the involvement of patients with the public being vital in the area of crisis management during and after the pandemic.

Click [here](#) to listen to the recorded webinar

Discussion

Prof Hyam facilitated the question and answer session. Below are some selected questions that were answered by relevant speakers.

Dr. Jeffery responded to the following questions :

Q1: When will the COVID-19 vaccine become available?

Answer: As we all know, many companies and governments are developing COVID-19 vaccines. As of today, no vaccine has been cleared fully and released for general use in any country. Availability has at least two components: (1) successful development and licensing of a safe and effective vaccine(s), and (2) sufficient manufacturing capacity, funding, and logistical support to make such a vaccine available to everyone. Thus, the first question: When will there be a licensed safe and effective vaccine(s)? No one knows the answer, but it is likely the very first one will occur in the fourth quarter of 2020 or the first quarter of 2021. How effective will it be? Again, no one knows. It is clear, that when the first one is licensed, the quantity will be relatively small. Thus, the second question: When will such a license become available to everyone? Again, no one knows for sure. If we assume that nearly everyone will be targeted (that is, over 7 billion people) then billions of doses will be needed even for one-dose regimens, and at least twice that for two-dose regimens. It is difficult to imagine that the manufacturing capacity will be sufficient to cover everyone for at least two years after licensing. I believe it will take even longer. Thus, a third question: How will the use of the vaccine be prioritized once manufacturing starts, but before there is sufficient vaccine for everyone? There are many opinions, including WHO statements on how this should be done. In addition, there are newspaper reports of agreements on how to do this. But what will happen in practice? That remains to be seen.

Dr. Obaid responded to the following questions.

Q1: It is very evident that COVID-19 has worsened the prospect of the already difficult situation related to polio eradication activities in Pakistan and Afghanistan. Any new thinking in the area?

- A. Yes. Your concern is right and valid. And with new realities not just for COVID-19 but also the fact that WPV1 transmission is globally restricted to Pakistan and Afghanistan following certification of eradication of endemic WPVs transmission from Africa this year, both countries have to adopt new tactics to complete the unfinished agenda of global polio eradication drive.
- B. While COVID-19 has been a global public health emergency of an unprecedented scale, it has provided many lessons and flagged opportunities as well. We are all learning in this regard with the passage of time and trying to apply these in communicable disease eradication, elimination, and control programs including the polio eradication drive.
- C. While learning from the COVID-19 response, advocacy for total government engagement not just health, sustained engagement of leadership at the highest level, polio vaccination as part of the integrated basic health services, and Real-Time Data transmission using the available technology with relevant data accessible to policymakers, media, and the public are under consideration.
- D. Keeping in view the damage caused by the pause in SIAs and decrease in routine immunization, and dual challenge of WPV1 and cVDPV2, the program has to adjust its strategic goals – the first one is to control cVDPV2 outbreak and prevent the expansion of the WPV1 transmission in remaining 2020 and interrupt endemic transmission in 2021.

Q2: Campaigns are an integral part of the polio eradication efforts and with COVID-19 these campaigns were disrupted in Afghanistan and Pakistan, leaving a gap. How can this gap be addressed now while maintaining the need to protect communities from COVID-19 transmission, which might increase from having such campaigns?

- A. Recognizing the reality of COVID-19 co-existence and GEPI's principle of no compromise on safety and security of all polio workers, guidelines for implementing house-to-house vaccination campaigns have

been modified and budgetary structures adjusted to provide appropriate PPEs.

- B. The Technical Advisory Group (TAG) on polio eradication in Pakistan and Afghanistan has posed a question on the safe resumption of a vaccination campaign in both endemics. TAG after careful review of risks and benefits endorsed revised guidelines on vaccination campaigns and advised resumption of polio vaccination campaigns.
- C. Two SIAs in each of the endemic countries have been implemented so far in July and August. There is no reported significant increase in disease reporting among communities and polio eradication personnel in areas having SIAs so far. Monitoring in a recent vaccination campaign in Pakistan showed that 93% of frontline workers were using face masks and 96% of the above aged below 50 years.
- D. Having said the above, it is also very important for the polio eradication program in both countries to systematically contribute to the efforts for improving routine immunization program service delivery as RI is the backbone for polio eradication, high RI is vital for sustaining polio-free status.

Q3: Do you mean WPV2 is still circulating in the environment?

Wild poliovirus type-2 eradication has been certified in 2015. The last WPV2 was reported in 1999 in India. In fact, you may be aware, WPV3 declaration has been certified as well in October 2019. The world is left with WPV1 circulation only and that too is limited to ONLY two countries in the world, Pakistan, and Afghanistan. Please accept my apologies, if my talk mentioned WPV2; if so, it may be considered as an inadvertent error. Having said the above, cVDPV2 is causing more polio cases than other poliovirus strains (WPV1, cVDPV1, and cVDPV3). In 2019 and 2020, cVDPV2 has caused globally 357 and 380 cases respectively, whereas WPV1 has caused 176 and 116 cases so far. In a nutshell, WPV2 has been successfully eradicated and its eradication has been certified.

Q4: How much Polio Immunization workers were/ are engaged in COVID-19 sample collection activities in EMRO countries?

The GPEI personnel were not engaged in sample collection. However, the GPEI supported the infrastructure that was used for shipment of the specimen to the laboratories, and in the polio laboratories, Global Polio Lab Network shared HR, equipment, and supplies.

Q5: It is necessary to provide a laboratory for polio in Yemen, where is the difficulty in transmitting samples?

- A. Polio Eradication Program in the EMR shares concerns about the shipment of the specimen from Yemen to the designated Global Polio Lab Network. It is, however, important to note that the system was working very well until 2017.
- B. Establishing a WHO accredited laboratory for polioviruses requires a very lengthy and complicated process. It has its own challenges as well – the most important being containment associated challenges. Each lab is annually accredited by WHO. As a result, there are 12 poliovirus labs for 22 member states in the EMR.
- C. Having said the above, program staff, national and WHO, have worked on multiple options since 2017, but no sustainable solution has been found so far due to the volatile security situation.
- D. At this moment, the best strategy is to mobilize specimen from Sana'a as soon as possible – most preferably through a land route to Oman or through the air to Nairobi.
- E. GPEI is working out a new Direct Testing approach which would be a simple, fast, and sensitive technique. Yemen is recommended to be a priority for this.

Q6: Are GEPI still committed to supporting PNIDs?

- A. In principle, the Global Polio Eradication Initiative is recommending supplementary immunization activities in WPV1 endemic and cVDPV outbreak countries.
- B. An exception to the above requires very strong objective (data-based) evidence reflecting the imminent risk of polio outbreak with no other alternate option like strengthening EPI for high coverage. A

thorough risk assessment is prepared and presented to the Outbreak Preparedness and Response Task Team that consists of experts from GPEI partners.

Q7: Afghanistan: COVID-19, WPV1, cVDPV2, insecurity, fragile health system, ban on polio SIAs, etc... all have a long-lasting impact on the war against polio and VPDs. Any guidance/new ideas/interventions/new technical advances?

The challenges in question are excellently spelled out. Much appreciated.

- A. Good news: Afghanistan has demonstrated on a couple of occasions that it can interrupt poliovirus transmission if the program has optimal access to children for vaccination multiple times successively.
- B. With the current peace dialogue, there are strong opportunities for improvement in access to children in areas having a ban on a house-to-house vaccination.
- C. COVID-19 situation where COVID-19 had given a global sharp focus on the opportunities and the importance of Polio integration, and transition with other essential services in such affected and vulnerable communities.
- D. Applications of technology are encouraged and applied in areas where there is no risk to the safety and security of frontline polio workers.



EMPHNET
The Eastern Mediterranean
Public Health Network

EMPHNET WEBi Series

Impact of COVID-19 on Polio Eradication, and Other VPDs Elimination and Control Efforts

Tuesday, September 15, 2020
17:00 to 18:30 Jordan Local Time (UTC +3)



Dr. Hamid Jafari
Director, Polio Eradication,
WHO EMRO

Facilitator





Dr. Jeffrey McFarland
Measles Elimination Team
Lead, DDPHIS/CGH/GID, US
CDC



Dr. Ezzeddine Mohsni
Public Health Expert ,
Member of SACE

Prof. Hyam Nicola Bashour
Public Health Expert, Chair of
WHO EMRO Regional
Verification
Commission for Measles and
Rubella Elimination.



Dr. Mawahib Jubarah
Sudan National EPI Manager

The webinar will focus on

- 1- Highlighting the impact of COVID-19 on the VPDs with the focus on polio eradication and other VPDs elimination/control.
- 2- Identifying the main challenges of immunization at the global, regional, and country levels in the context of COVID-19.
- 3- Discussing appropriate strategies to revitalize and scale up the immunization programs during the COVID-19 Pandemic.
- 4- Proposing applicable, sustainable, and innovative solutions toward polio eradication and other VPD eliminations.



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Biographies of Guest Speakers and Facilitator

Dr. Jeffrey McFarland, Measles Elimination Team Lead, DDPHISIS/CGH/GID, US CDC.

Dr. McFarland is a Medical Epidemiologist at the US CDC. Dr. McFarland worked as the Country Director; Global Disease Detection (GDD) Director; Influenza Coordinator at US CDC. In 2013, he worked as a Medical Officer, Immunization at the WHO, Country Office for India. In 2015, he worked as the Director of the Influenza and Animal-Human Interface Program, US CDC/ Vietnam. Currently, he is the Measles Elimination Team Lead, Global Immunization Division at US CDC.

Dr. Mawahib Jubarah, Sudan National EPI Manager

Dr. Mawahib is a public health specialist holding a medical doctorate(M.D.) in Community. She is the national EPI manager in Sudan and an Associated Professor at Nile University with a focus on Epidemiology, Biostatistics, Research Methodology and Medical Ethics. Dr. Mawahib has Nine years' experience in Immunization in VPDs Surveillance, outbreak investigation, and response SIAs, RI, and vaccine management. With an extensive contribution to EPI related research at national and sub-national during this period and thesis supervision.

Dr. Muhammad Obaid ul Islam, Member of the Global Surveillance Task Team

Dr. Muhammad Obaid ul Islam, is a member of the Global Surveillance Task Team, Cessation Risk Team and nOPV2 working group from the EMR. Dr. Obaid ul Islam has been working in the arena of public health in diverse areas since he graduated from Medical School in 1987. Prior to his current position, Dr. Obaid ul Islam served in the UNHCR where he was supporting health care systems in Pakistan for establishing community-based primary health care programs like Acute Respiratory Infection (ARI) and Childhood Disintegrative Disorder (CDD). In addition, he worked for Malaria and Leishmaniasis Control in the Afghan Refugees. Within the EMR, Dr. Obaid ul Islam worked as a Medical Officer for Certification for about two years.

Dr. Ezzeddine Mohsni, Public Health Expert and Member of SAGE

Dr. Mohsni is a medical doctor and a specialist in Public Health and Epidemiology. He has over 26 years of experience with vaccines and immunization, at both National and International levels. Dr. Mohsni served first for 8 years as National EPI Manager at the Ministry of Health, Tunisia. He then moved to the WHO Eastern Mediterranean Office where he served for 16 years in several high-level positions.

Prof. Hyam Nicola Bashour, Public Health Expert, Ex-SAGE Co-Chair. Chair of WHO EMRO Regional Verification Commission for Measles and Rubella Elimination. (Facilitator)

Hyam Bashour is a Professor of Epidemiology and Community Health at Al-Sham Private University. She got her Ph.D. in Epidemiology from the London School of Hygiene and Tropical Medicine, UK. She also holds a Master's in Health Professions Education. Prof. Bashour served for six years as a member of the WHO Strategic Advisory Group of Experts on Immunization (SAGE). She is currently the Chair of the Regional Verification Commission (RVC) for Measles and Rubella in the Eastern Mediterranean Region of the World Health Organization.