

# Countries' Strategies to Maintain Immunization Achievements During the Pandemic while Adapting to Post Pandemic

## Introduction

The unprecedented public health emergency created by the COVID-19 outbreak has been detrimental to the health system in almost all countries. These countries found themselves, in particular in the first as well as acute phases of the epidemic, obliged to mobilize all available (or what remained available) resources for the public health system to fight COVID-19. In some cases, they had to reduce and even shut down the large majority of other public health services, except emergencies. This has affected even the most well-established and deeply rooted preventive programs like routine immunization.

More than half (53%) of the 129 countries where data was available reported moderate-to-severe disruptions, or a total suspension of vaccination services during March-April 2020. In addition to the suspension of services, other barriers associated with the pandemic such as delay in planned vaccines deliveries due to the lockdown measures and the ensuing decline in and limited availability of commercial and charter flights

The situation in the EMR has been extremely variable. While some countries took the decision to suspend all immunization services, some others continued to offer them. However, how these decisions were made, based on which evidence (in particular in terms of risk assessment and consideration of vulnerable populations), what have been the accompanying measures to reduce the risks of COVID transmission during vaccine delivery as well as those to inform, sensitize, educate and comfort the clients; what specific logistical changes have been made on the delivery strategies as well as vaccine supply and management to cope with the COVID context, how the defaulters mapping and management has been dealt with, answers to these highly important and key strategic questions are

not available or at least haven't been considered in the majority of the countries.

Highly concerned about that, and as an active partner in the area of vaccines and immunization in the Region, GHD/EMPHNET decided to launch a series of "Immunization" specific webinars. Conducted in partnership with US CDC and in collaboration with other stakeholders (UNICEF, WHO, BMGF, Gavi, and others), these webinars are an attempt to contribute as much as possible to supporting countries from the Region to adopt the most suitable evidence based strategies across the various COVID-19 response phases; hence, minimize the impact on achievements of national immunization programs while respecting COVID-19 transmission reduction instructions and maintaining population trust and demand.

GHD/EMPHNET launched its first webinar in this series on Immunization on July 7, 2020, from 17:00 – 18:30 Jordan local time (UTC +3), under the title "Countries' Strategies to Maintain Immunization Achievements During the Pandemic while Adapting to Post Pandemic". This Webinar will be followed by other webinars that will address more contextual thematic country immunization priorities.

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

## Webinar Specifics

Disruption of life-saving immunization services will increase the number of susceptible individuals and raise the likelihood of outbreak-prone vaccine preventable diseases (VPDs), in particular in hot spots, high risk areas and among vulnerable populations.

To mitigate the impact on achievements of immunization programs, GHD/EMPHNET launched, in collaboration with US CDC, a series of “Immunization” specific webinars to tackle key priority areas related to immunization programs within the context of COVID-19.

### Webinar Objectives

The main objectives of this webinar are:

- To highlight the impact of COVID-19 on immunization services and address relevant challenges.
- To discuss, within country COVID-19 response framework, the immunization services maintaining recommended mitigation opportunities and measures to inform the country immunization strategy during COVID-19.
- To understand country situation, strategies, plans and progress in terms of resuming/maintaining immunization activities.
- To define the needed support for the implementation of these strategies and plans.

### Webinar Speakers

region:

- **Dr. W. William Schluter**  
*Director, Global Immunization Division, US CDC*
- **Prof. Zulfiqar Bhutta,**  
*Co-Director, Centre for Global Child Health, Toronto & Founding Director, Institute for Global Health & Development, The Aga Khan University, Pakistan*
- **Dr. Firas Jabbar Al-Mossawi**  
*National EPI Manager /Iraq*
- **Dr. Ehab Basha**  
*National Vaccination Officer, EPI /Egypt*

The webinar was facilitated by:

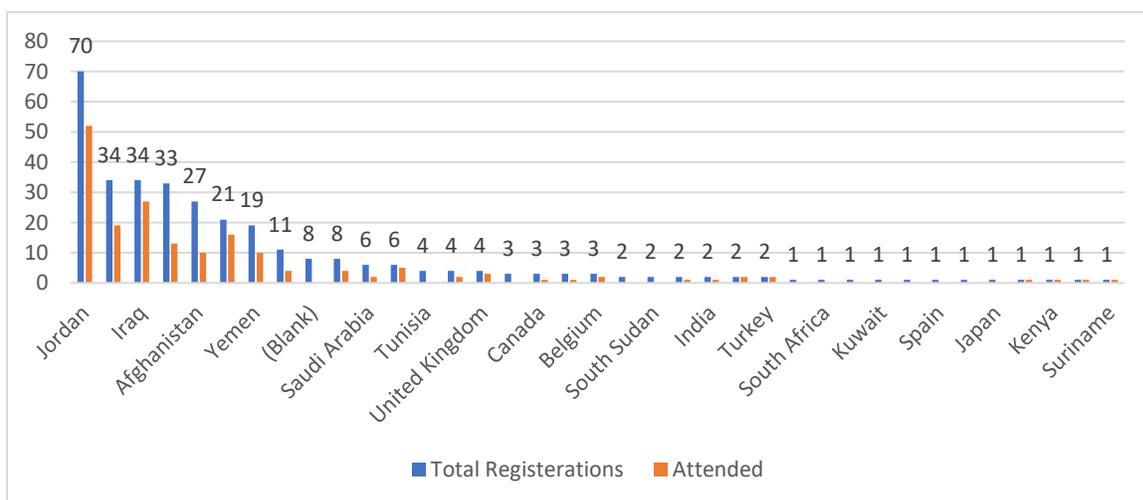
**Dr Salah Al Awaidy** - *Communicable Diseases Adviser to Health Affairs /Oman & Ex-SAGE Member*

### Webinar Attendees

Registration was open for one week prior to the webinar and was announced through EMPHNET’s communication and networking channels. In total, 325 registered, 56% (n= 181) attended. The following graph displays the distribution of registered and attendees by countries.

### Overview of Presentations

The webinar was conducted in English and included four presentations (10-15 minutes each). Beginning with Webinar introduction by Dr. Salah Al Awaidy, then the first presentation by Dr. William on Global Vaccine Action Plan Indicators and Transition to IA



The Webinar hosted international immunization experts together with two EPI managers from the

2030. The second was presented by Dr. Zulfiqar Bhutta about” Impact of Covid-19 on child health and

immunization systems: how can we rebuild better?”

The third presentation was by Dr. Ehab Bash on Reducing Impact of COVID-19 on The National Immunization Program in Egypt. The fourth was on “Strategies to Maintain Immunization Achievements During the COVID-19 Pandemic while Adapting to Post Pandemic” by Dr. Firas Al-Mossawi.

A discussion session followed the two presentations. The discussion was 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 on scheduled time, with a duration of 1.5 hours.

### Webinar Introduction

*Dr Salah Al Awaidy*

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As the webinar facilitator, Dr Salah Al Awaidy welcomed the speakers and attendees and put the webinar theme into the current context.

### COVID-19 Impact on Global Vaccine Action Plan Indicators and Transition to IA2030

*Dr. W. William Schluter*

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Dr. William presented the background of COVID-19 impact on the progress toward the Global Vaccine Action Plan (GVAP) indicators and the anticipation when the world moves towards adoption of the Immunization Agenda 2030 (IA 2030). Dr. William started by underlining the latest updates on COVID-19 situation globally and added that the outbreak is continuing to expand in the region of America, as well as Africa and southeast Asia. The pandemic seems to be under control in the Western Pacific and the curve is flattened. Dr. William stated that the impact of the pandemic goes far beyond just the number of cases and deaths attributed directly to the COVID-19. In some cases, COVID-19 associated deaths are not capturing the true impact of COVID-19 mortality around the world and the mortality in some countries is more than 50% higher than reported. Moreover, in addition to the deaths, there is an economic impact. According to the world Bank estimates, there is 5.2% contraction that will be most hit the most vulnerable population. He added that according to the poverty projection in 2030, 130 million people will be moving to extreme poverty. Then Dr. William clarified that 2020 is the last year of the GVAP, end of a decade of Gavi action plan 4, and the end of measles and rubella strategic framework. On the other hand, 2020 is a

continuation of Polio Endgame Strategy 2019–2023 and Global Health Sector Strategy on Viral Hepatitis 2016 –2021. Dr. William also mentioned that 2021 is the start of the Immunization Agenda 2030, Gavi 5.0 and Measles and Rubella Strategic Framework 2030. He mentioned that 2019 wasn't a great year for VPDs, where there was a large increase in wild polio cases and circulating cVDPV circulation with 176 wild poliovirus cases compared to only 33 and 2018 and a low of 22 in 2017. Furthermore, there was a widespread of measles outbreaks and other VPDs. Dr. William said that while there was good news regarding achievement of GVAP immunization indicators and according to the most recent data available in the joint report 2018, there is a steady progress in the number of countries (129 countries) that reported more than 90% coverage at national level. Then Dr. William described the key GVAP indicators and their progress, which exceed the Millennium Development Goal 4 target for reducing child mortality by more than 2/3 compared to the baseline of 1990.

Then Dr. William presented the obvious impact on the number of mass immunization campaigns that have been cancelled or postponed. 56 countries with at least one VPD immunization campaign postponed (fully or partially) and the number of (fully or partially) postponed campaigns is 101 out of which 50 campaigns were postponed in the African region and 15 in the EMR. The mass vaccination campaigns have been postponed for essentially all antigens including measles, rubella and polio. Dr. William mentioned that in addition to the impact on immunization, there has been a dramatic effect on VPDs surveillance, where there was a widespread and significant impact on polio surveillance sensitivity and major disruption in shipment of specimen. Furthermore, all 21 high-risk countries are being impacted by COVID-19 and multiple Polio staff members across regions are infected. Concerning the impact on measles campaigns, Dr. William shared a graph showing that 42 countries postponed or may postpone the measles campaigns which will result in more than 178 million children missing measles vaccine. He said that meanwhile, some countries are deciding to move and conduct measles campaigns as DRC, Nepal. Dr. William presented the impact of COVID-19 on Rubella. Dr. William shared a graph showing that six countries suspended the Td SIAs.

Dr. William mentioned that reported information showed that the majority of countries showed at least disruption/suspension of essential immunization services around the globe. Dr. William shared

information from the Gavi report, referred that among the Gavi eligible countries that were planning to introduce a new vaccine, at least 39 out of 68 already have been marked delayed and will not probably do so in 2020 due to COVID-19. Dr. William expressed the real concern of the vaccinator safety during the pandemic; therefore, to prevent transmission of COVID-19 during the vaccination sessions, the Global Polio Eradication Initiative developed infection prevention and control guide for the vaccinators to protect themselves and caregivers from being infected. At the end, Dr. William presented the IA2030 and mentioned that there may be opportunities hidden in the COVID-19 pandemic. He highlighted the following seven strategic priorities; Immunization Programs for Primary Health Care/ Universal Health Coverage, Commitment & Demand, Coverage & Equity, Life Course & Integration, Outbreaks & Emergencies, Supply & Sustainability, and Research & Innovation. He also highlighted opportunities to mitigate the impact of COVID-19 by each strategy.

### **Impact of Covid-19 on child health and impact of Covid-19 on child health and immunization systems: how can we rebuild better?**

*Prof. Zulfiqar Bhutta*

Prof. Bhutta started his presentation by highlighting how the global situation. The mitigation strategies in many places have been much more severe than what the people have anticipated. The consequences of COVID-19 on children are many but the direct effects on children are minimal and a small proportion is seriously ill. However, the indirect consequences include excess poverty that families fall into, the global education crisis, the threats to children health and survival like the interruption of immunization systems and issues related to children's nutrition and safety. He then explained how immunization inequities are not new by presenting immunization trends data from Pakistan from 1990 to 2013. During that period, rates of fully immunized children were close to 85% in some districts which are more fortunate compared to those who were below 10-15% and this is one of the vaccine inequities Pakistan faces. He then proceeded to present drivers of inadequate immunization coverage. One is the supply chain challenges. In Pakistan context, the polio program has driven a lot of immunization work and in turn, left the routine immunization behind. The demand side factors is another driver where poor people lack access to immunization services and also face barriers related to traveling and bringing their

children to vaccination centers. As well, there is a community hesitancy around the polio program that impacted routine immunization. So, both the supply and demand factors contribute to vaccine inequity in many geographies. Prof. Bhutta illustrated the inequity by showing gender disparities. Where girls don't have the same access to health care, and this has nothing to do with health systems but with social systems and social-cultural determinants and drivers. Prof. Bhutta shed light on completely missed or zero dose children who have not received a single immunization dose. This can be seen in 20%-30% of children in rural districts, and is not just the case in Asia alone but also in Africa. He explained that the geospatial description of inequity is not just geographic but is related to social determinants and factors of access, community, and mobilization. He then proceeded to show a graph of the proposed conceptual framework for the impact of COVID-19 mitigation strategies on maternal, child and adolescent health and wellbeing. How reduced health services coverage, nutrition interruption, economic crises with families falling through poverty, and interruption of education contribute to the impairments in maternal-child health. There have been some early estimates of indirect effects of the COVID-19 pandemic that could have impacted maternal-child health. Prof. Bhutta referred to data from colleagues at Hopkins, where they looked at the health system effect on coverage of interventions, also the interruption model where the availability of supplies, health workers, and provision of health services lead to a reduction in coverage. They believe that there could be an upward in the least worst-case scenario of up to 44% excess child mortality because of this interruption of health services and this is backed by data of projected excess maternal and child death per month in 118 countries. He then showed data of estimated distribution (fewer people receiving services) in essential RMNCH services coverage in South Asia, where the number of people impacted by interruption of vaccination coverage run into millions as seen in India and Pakistan. Prof. Bhutta proceeded to show data from NIH Pakistan on immunization coverage between January and May and how it has been significantly impacted by COVID-19 with a 50%-60% drop in coverage in many areas. He also shared vaccination coverage data from Sindh, where it shows that from the 27th of March to the beginning of May, the interruption was significant. Although vaccinators were available in many places, data indicates that the supply chain got interrupted and most importantly the families did not bring their children to vaccination centers. He then shared the lockdown effect graphic in

Sindh, and how the RI gradually increased once the lockdown has been softened. There is now reinstatement and building-back better, so its an opportunity to do better and gave an example of the Sindh that is trying to achieve a vaccination coverage above 80%-85%. Before closing, Prof. Bhutta emphasized the role of community and the importance of community engagement which is part of our COVID-19 response He also stressed on the importance of make sure that the program financing is protected, which is still needs to be confirmed. There is also a need to ensure ring-fence financing for immunizations.

## Reducing Impact of COVID-19 on The National Immunization Program in Egypt

*Dr Ehab Basha*

Dr. Basha started his presentation by introduction on the COVID-19 situation. In Egypt, the 1<sup>st</sup> case was detected on 15<sup>th</sup> Feb 2020, the cumulative number of cases up to the end of June was 68311 cases and 2953 deaths. He added that in January 2020, Egypt conducted a risk assessment to identify the potential risk of COVID-19 on the immunization program. He mentioned that the first potential risk is the decrease in demand on vaccination services due to fear from being infected which will lead to decrease in immunization coverage. Subsequently, the country may face VPDs outbreaks. Dr. Basha mentioned that Egypt started to implement risk mitigation plan based on three main pillars. The first pillar is implementing IPC activities. The second is implementing risk communication and social mobilization plan. The third is close monitoring of vaccination coverage and enhancing supportive supervision activities. He described in details the IPC four actions which have been implemented in the health centers to prevent COVID-19 infections: physical distancing during vaccination sessions, crowdedness prevention through increasing the number of vaccination points and sessions, extending duration of the vaccination sessions, and practicing hand hygiene with emphasis on mandatory wearing of surgical masks for vaccinators and clients. Dr. Basha described the social mobilization plan as the second pillar in risk mitigation, he also mentioned its tools and content. Furthermore, Dr. Basha explained the third pillar of risk mitigation which is enhancing supportive supervision and continuous monitoring of the immunization coverage through monthly analysis of vaccination coverage (2019/2020), examining the causes of any decrease in vaccination coverage and

applying the corrective actions. Further, Dr. Basha mentioned that they are monitoring the rumors by using Events Based Surveillance and applying search of the key words on social media / Facebook to detect any rumor as early as possible in order to address its harmful effect.

Dr. Basha gave a brief on the actions implemented to mitigate the negative impact of COVID-19 on immunization which started by developing, finalizing and disseminating SOPs that include ToT at subnational level then on job training for vaccinators. According to Dr. Basha, there is no statistically significant difference in the coverage so far due to actions taken based on the plans. The coverage of the mentioned vaccines was 92-94% in 2019 and 2020 in the same period. He added that Egypt conducted the supplementary immunization campaigns according to their plans, where they conducted the bOPV vaccine in 16-20 Feb. 2020 for the children under 5 years and the coverage was 100%. Also, they conducted the MR campaign for children between 9 months to 10 years in March 8-28 2020 and the coverage was 99.7%. Further, Dr. Basha shared a table of key AFP surveillance indicators achieved in Jan-June 2020. The table indicated that Egypt still achieves the three key AFP surveillance indicators; the NPAFP rate was 2.6/100000 population under 15 years, stool adequacy reached 93% and AFP cases notification indicator was 99%. Dr. Basha ended his presentation by mentioning the challenges and proposed support needed from partners. The first challenge is their concern on the vaccine demand in case of increase in COVID-19 cases and the need for support through T.V, Radio and Media communication campaigns. The second challenge is the insufficiency in vaccine storage capacity and the need to upgrade cold chain capacity at peripheral level. The third challenge was the turn-over of EPI staff and vaccinators in the subnational and requested support from partners to conduct cascade training at all levels.

## Strategies to maintain immunization achievements during the COVID-19 pandemic while adapting to post pandemic -Iraq

*Dr. Firas Al-Mossawi*

Dr. Al-Mossawi started his presentation by giving a rapid description of demographic information of Iraq. then gave an overview on COVID-19 situation where the first confirmed case was reported in 24<sup>th</sup> Feb. 2020 and Iraq closed the international borders on 14<sup>th</sup> March and implemented curfew on 17 March. Dr. Al-

Mossawi explained that response measures resulted in drop in immunization coverage. To mitigate the negative impact of COVID-19, Iraqi MoH developed its immunization response plan to improve immunization coverage. Noting that vaccine availability remains an issue in the country. Dr. Al-Mossawi added that by 4<sup>th</sup> July, the reported cases were 58354 and 2368 deaths. To contain the COVID -19 transmission, Iraqi government implemented complete lockdown in some provinces (every other week). Then Dr. Al-Mossawi shared the COVID-19 dashboard for Iraq, which showed that the COVID-19 cases have sharply increased and Baghdad-Raasafa is the most highly affected.

Dr. Al-Mossawi shared a graph that showed the number and distribution of health care personnel who are being infected by COVID-19. where more than 4000 cases were reported among healthcare personnel; 19% are physicians and 51% are paramedics working in health facilities. Dr. Al-Mossawi shared information of the assessment conducted in collaboration with WHO, which pointed out a sharp decrease in outreach and mobile immunization activities Dr. Al-Mossawi mentioned that 5% of vaccination staff were involved in COVID-19 response and 57% were partially involved. Dr. Al-Mossawi shared a graph presenting the national immunization coverage for different Antigens, as of May 2019 and 2020. He mentioned that the COVID-19 had a harmful impact on immunization coverage and resulted in its decrease in 2020 compared with the same period in 2019. For example, the OPV3 and Penta 3 dropped from 86 to 71. The IPV1 dropped from 86% to 65% and MCV1 dropped from 78% to 69%. Then Dr. Al-Mossawi presented the unmet target by each DoH of OPV3 and MCV1. He mentioned that the target is not reached in all the 19 DoHs. Furthermore, he shared a graph including the NPAFP rate where Iraq has achieved the requested standard indicator of the annualized rate as of week 27, a decrease was noted in 2020 rate compared with 2018 and 2019 where the NPAFP rate was 6.7 and 7.4 respectively. Dr. Al-Mossawi highlighted the shift of immunization staff and funds from the immunization

program towards COVID-19 response. Dr. Al-Mossawi gave information on the decrease in coverage by 20-30% and an increase in the number of unvaccinated children from the cohort 0,2,4,6,9,12 and 18 months in a total of 30,000 children which increase the risk of resurgence of VPDs. He underlined the effect of COVID-19 on the planned activities which resulted in deferring of the 1<sup>st</sup> round of polio SNID, EPI external review, microplanning training for RI, as well as postponing other relevant activities. Dr Al-Mossawi described the immunization services continuity plan. He said that the plan was developed based on coverage analysis and risk assessment using the published WHO Interim Guidance and IPC measures to ensure health care provider, caregivers and community safety and considering population vulnerability to COVID-19 and VPDs. Dr. Al-Mossawi summarized the plan objectives which include advocacy for the continuity of immunization services, closing the gaps in immunization to reach the unimmunized and dropped out children, promoting for the importance of immunization, reach and trace the missed children and to ensure infection and prevention control best practices during immunization sessions. Then he mentioned the two important sections of the EPI action plan: the immediate and the subsequent actions. The immediate actions include development and distribution of IEC materials, provision of PPEs, promotion campaigns, IPC training, advocacy and financing and boosting the defaulter tracing mechanism. The subsequent actions include conducting polio campaigns, multiantigen campaigns and outreach activities and mass media campaign to increase demand. Finally Dr. Al-Mossawi referred to the needed support from partners, for instance providing IEC materials, support defaulter tracing and outreach activities, IPC training and provision of PPEs, support advocacy campaigns, provide financial support to polio campaign, mass media campaign to reduce vaccine hesitancy.

## Discussion

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The first Q& A session took place after the first two presentations by William and Bhutta facilitated by Dr Salah Al Awaidi

**Q1. Potential impact of resuming full scale RI on COVID-19 transmission, are there any model to show that resuming RI is likely to result in increased COVID-19 transmission assuming that all risk mitigation measures are well implemented?**

Answer: Dr. W. William Schluter

CDC and WHO have both published guidance about the benefit of continuing immunization services during the pandemic. Of course, I think that each country context or situation should be considered. Obviously, it would need to be done in a safe way and depending on the local transmission of the SARS COV2 virus. There are various measures in providing those services, but the provision of the vaccination even during the pandemic will prevent more loss of lives. Its notable that physical distancing during the pandemic has an impact on transmission of other diseases. Measles is an example as, although there is continuing outbreaks in countries that have implemented physical distancing for COVID-19, measles transmission has decreased. In general, WHO and CDC would agree that the benefits for continuing PHC services and vaccination even during the pandemic outweighs the risks in overall mortality.

**Q2. When we look at the pandemic crisis, we always look at the gloomy side and the pandemic crisis also brings us a lot of opportunities to recast and to reinvent the RI to overcome both the current and chronic obstacles. Can you comment on that?**

Answer: Dr. Zulfiqar Bhutta

Of course, every crisis is an opportunity and the question is how do we grab the opportunity? So, the sad reality is that it took a fair amount of time after Ebola to rebuild MCH systems and immunization systems in the countries affected. So, it doesn't happen automatically. There has to be a focus on trying to reconstitute and reinstate services. It is problematic in the sense that a lot of traditional approaches to scaling up immunization, such as through mass campaigns for Polio SIAs might be problematic in circumstances, because they would require additional strategies to both protect the vaccinators as well as protect the communities. Therefore, some thought and effort has gone into looking at risk benefit assessment. So the purpose in showing the inequity slides from Pakistan that it's not just COVID-19 that has led to vaccine inequity, this was there even before and this is now an opportunity to rebuild immunization systems and health systems after COVID-19 to actually do better. How this can be done? We are convinced that using CHWs or who are embedded in in those communities at this time as means of outreach and providing a childhood immunization is probably the right way to go because they have the confidence of the community and they can reach children much more efficiently than somebody coming from a big town. So, we need to be innovative in terms of how we have vaccine outreach and how to truly integrate Polio immunization with RI in our country. I know it will increase the burden somewhat on the vaccination teams but if we have a Polio immunization SIAs being reconstituted, reinstated. As for the recommendation of IMB, there is absolutely no reason why they cannot be done alongside getting some RI doses back up to a birth cohort. That is not small and we are close to around -in our estimation- half a million children are now under vaccinated. We could also link it to conditionalities at this point in time. The conditional or the unconditional cash transfer in Pakistan to women are one of the biggest strategies for poverty alleviation and could be linked to immunization. So yes, you are right, we can build better and we should build better after COVID-19 and we should make sure that some of the issues that we are facing with data right now are also addressed at the same time.

**Q3. The importance of ring-fence financing for RI and perhaps for campaigns in non-Gavi eligible countries, what is possible to commit to improving the restoring of immunization during post COVID-19?**

Answer: Dr. Zulfiqar Bhutta

When I was on the Gavi board and on SAGE as well, this was the question that came up again and again. What about noneligible countries, middle income countries where there are vaccination gaps? So, I think children are children everywhere and I don't think there should be unimmunized children in any circumstances. There may be greater proportion of national resources and funding in non-Gavi eligible countries, but I think this COVID-19 crisis has broken the back of many health systems right now in terms of financing. Countries have been taking loans to make sure that they are able to afford the protective equipment, they afford the health service strategies. That is why I keep saying we have to ring-fence money that is going into MCH and immunization services, money that was already there. However, we should see how we can enhance it because there is recovery response that will require more resources than before. So I am very supportive to speaking with the World Bank, the GFF and other donor communities to ensure the right amount of support for the really poor countries , not just for

response to direct effects of COVID-19 but for the indirect effects as well. which are probably in magnitude much greater.

**Q4. What is the guiding principle for resuming RI and campaign services?**

Answer: Dr. W. William Schluter

In general, the WHO recommendation is that mass vaccination campaigns may be delayed, but RI should be continued, even during the pandemic.

**Q5. What is the CDCs advice for countries suspending vaccination campaigns due to COVID-19? How to weight benefits over risk of postponing these campaigns?**

Answer: Dr. W. William Schluter

If there is for example an ongoing measles or Polio outbreak, then we would recommend that the campaigns be conducted even during the pandemic because of the risk of the disease transmission.

For routine immunization, this would vary by country context based on the measures that can be implemented. For example, adjusting hours of services or the provision of PPEs for HCWs. But in each of those countries, they would need to evaluate their access to those supplies to ensure that their workforce stay safe and can provide vaccination services safely. I think there were concerns, I've seen in the chat and from reading in the news that there have been specific examples where health care workers were blamed for transmission, and certainly in those situations where health workers would be put at risk because of possible violence or being accused of spreading COVID-19. I think that it would be important to take the necessary precautions, but also to do the necessary education through media or social mobilization or other mechanisms.

Careful tracking of children who missed doses of vaccination should be completed so that missed doses can be administered as soon as possible. Countries may consider how to efficiently deliver preventive services including vaccination when safe to do so.

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The second Q& A session took place after the second two presentations by Dr. Ehab and Dr. Firas facilitated by Dr Salah Al Awaidi

**Q6. Condition for resuming a routine immunization and NIDs wherever you have it, we forget to consider the community perception and rational for resuming this sort of activities and to inform health workers about it, I wonder if anybody among two countries, whether any assessment has been done of COVID-19 and community perception towards resuming the routine as well as implementations of SIAs in your country.**

Answer: Dr. Ehab Basha

Really in Egypt, our communities are engaged in the immunization process. So, we are working with community leaders to deliver message to their community. About assessing the community response to immunization, No we did not do any research to assess knowledge and practices of the community towards immunization, but we noticed that the vaccination demand in the community is high even during COVID-19. For example, during the last period we introduced a new vaccine, which is fractional IPV for those who didn't get the vaccine or the first cohort from January 2016 to March 2018 and there was a high demand which reflects the community acceptance..

**Dr. Salah: Dr Ehab, I totally agree, its personal perception rather than a science because you need to do a proper assessment to get the right information from the community. What's the community perception towards this? So, your actions will be based on these results. It is going to assist in developing communication messages because you would know exactly what the community perception is.**

Answer: Dr. Firas

Right now, we are in community transmission and we are facing difficulty in facing COVID-19 and there is some limited assessment by the WHO exactly to assess our preparation, how our activities mitigate. But how the community perception regarding the restoration of vaccine or vaccine activities, truly we did not do such an

assessment. But I think some EPI managers at the provincial level have done some actions about this issue either with health promotion or other activities with relevant agencies and community leaders.

**Q8. What are the measures taken in Egypt to address the safety of health care staff within the quarantine and the general health facilities? Were there any shortcomings in the training of health care professionals to respond to COVID-19 and how do you advise the different actors to respond to them?**

Answer: Dr. Ehab Basha

I cannot give any information about the quarantine in hospitals because I am assigned for EPI as the national vaccination officer. So, I can speak about the health care facilities providing vaccination. We took many measures to ensure proper levels of IPC as one of the three pillars of our risk mitigation plan. Also, we are now planning for cascade training for all levels of the EPI to ensure the implementation of developed SOPs.

**Q9. In countries like Iraq, where health care providers, even at PHC level are being infected and mistrust is developing among people and fear to come to health center, what should be the best strategy to bring back people to PHC for vaccination, even when the lock-down or restrictions are relaxed? Any similar situation elsewhere and any good example of interventions?**

Answer: Dr. Firas

Truly, we started from the first stage through health promotion and providing advice to all communities to respond to COVID-19 in order to mobilize people and announcing the continuity of services especially immunization services. Also we have started actively IPC training with UNICEF for all levels down to the PHC level to train all health care providers about the infection, prevention and control strategies and to start rebuilding the trust between communities and the PHC centers, we are starting social distancing and training all attendees to primary health care centers and we are working to make the session in an open place and prevent crowding.

**Q10. What is the impact of COVID19 on availability of supplies and logistics?**

Answer: Dr. Ehab Basha

For us in Egypt, we did not have any problems concerning the supply chain or logistics because we always have the safety stocks for no less than three months.

Answer: Dr. Firas

We are facing such an issue, but the complete lockdown and curfew led to vaccine shortage. UNICEF supplied us all the needed vaccines and it is now in our stores and we can resume with all vaccines from the next month.

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Questions answered in chat:

**Q1. Does containment have an impact on the transmission of measles in the population since airborne transmission with the use of barrier measures.**

Answered By Dr. W William Schluter:

At the recent measles/rubella laboratory meeting, there seemed to be some evidence from selected countries that physical distancing to prevent COVID-19 transmission resulted in a decreased transmission of measles.

**Q2. Is there any globally/country level contingency plan of PEI/EPI? If Yes, how much it is applicable and to what extent it mitigates the risk of COVID-19?**

Answered by Dr. W William Schluter:

It is my understanding that earlier preparedness plans are being updated to address COVID-19 specific situation.

**Q1. What are the strategies to overcome shortage of human resources?**

Answer:

Indeed, human resources related issues are one of the key challenges facing EPI in Iraq and Egypt, more dominantly the rapid turnover specially in remote areas. Relatively, both countries are better than others in the region in terms of availability of EPI human resources.

**Q2. What are the specific activities that can be adopted now to minimize the drastic impact of the pandemic on Polio eradication and Measles elimination activities?**

Answer:

Maintaining and scaling up routine immunization as well as strengthening VPDs surveillance are among the key priority strategies to mitigate COVID-19 risk on immunization with a particular focus on vulnerable groups, tracking defaulters and missed children. It is highly recommended to conduct risk assessment at different phases and to take the necessary measures accordingly. Mass vaccination should also be taken into consideration once it is feasible.

**Q3. While the < 5 children are almost spared from the serious outcomes of COVID-19, yet they can be badly hit by the collateral damage of the pandemic on the EPI and VPDs.**

Answer:

Yes, you are right and, accordingly, national plans should address this collateral damage.

**Q4. Covid-19 era represents good opportunity for enhancement of community involvement in immunization**

Answer:

Community engagement is a key strategy for scaling up immunization and increasing demand. COVID-19 is an opportunity to build the trust in public health services and to strengthen the role of communities.

**Q.5 How we can calculate or estimate percentage of zero vaccine children?**

Answer:

Immunization profile of AFP reported cases, rapid surveys and immunization coverage are proxy indicators to estimate the zero dose.

**Q6. It is interesting to see no effect for COVID-19 on immunization despite all what expect and hear. How could your experience fit for other countries with strong measures such as lockdown and community fears to use health facilities, could it have the same success? Other question about training: How safe it is to bring together the trainees? Have you tried other ways of distance/online training?**

Answer:

It depends on country context and measures, higher levels commitment to immunization and strong EPI network are crucial success factors. Regarding the training, Egypt EPI used diverse methodologies to conduct training activities including online and face to face training while taking the necessary preventive measures such as dividing the trainees into smaller groups and maintain social distancing as well as rescheduling and postponing non urgent training activities.

**Q7. Is there a role for community participation within national plan in Iraq or Egypt?**

Answer:

There are many community initiatives in Iraq and Egypt. For example: EMPHNET is supporting Iraq MOH in community- based surveillance and Polio transition using community focal persons for AFP, measles and Rash notification and raising health awareness in both Iraq and Egypt. It is worth to mention that both countries have various experience related to community engagement in development in general and health since decades, however these initiatives need to be revitalized and empowered.

**Q8. I want to know in what measurements do you conducted polio campaigns/mass campaigns**

Answer:

Currently, campaigns and mass vaccination are postponed in both countries and will be restored once the situation is improved or there is a need and according to WHO guidelines. Egypt conducted Polio and Measles campaigns just before the lockdown.

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**Q9. Is there a plan to implement a national influenza vaccination campaign in Egypt in response to the expected second COVID-19 pandemic?**

Answer:

Currently, it is not on the plan of Egypt's EPI to conduct a national influenza vaccination campaign.

**Q10. What is the impact of COVID-19 on supply availability and logistics?**

Answer:

Globally and regionally, COVID-19 has a negative impact on the supply chain and logistics including transport delays of vaccines that exacerbated the situation. UNICEF has reported a substantial delay in planned vaccine deliveries due to the lockdown measures and the ensuing decline and limited availability of commercial and charters flights.

**Q11. Will the frequent administration of polio vaccine be safe?**

Answer:

Yes, it is safe.

**Q12. Although Egypt NPAFP Rate is more than 2, what about the subnational and districts levels?**

Answer:

The NPAFP rate varied by provinces and districts. Some governorates did not reach the target so far. However, the situation might change before the end of the year where focus will be given to reach the target.

## **Biographies of Guest Speakers and Facilitator**

### ***Dr. W. William Schluter***

*Dr William. Schluter is the Director of the Global Immunization Division at US CDC. He has worked towards the eradication, elimination, and control of vaccine-preventable diseases for more than 20 years in a variety of settings. Between 2012 to 2017 he was on detail from CDC to the World Health Organization (WHO) Western Pacific Regional Office, where he served as the Group Lead for Accelerated Disease Control for the Expanded Program on Immunization Unit where he provided support to the 37 countries and areas of that region. Prior to that position, he was detailed to the WHO Nepal Country Office, from 2009 to 2012, as the Team Lead for the Immunization Preventable Diseases Unit and to the WHO Ethiopia Country Office, and from 2004-2007 he was coordinating programmatic and surveillance activities for vaccine-preventable diseases.*

### ***Dr. Zulfiqar A. Bhutta***

*Dr. Zulfiqar A. Bhutta is the Distinguished University Professor and Founding Director of the Institute for Global Health and Development and the Centre of Excellence in Women and Child Health, at the Aga Khan University. He also holds the Robert Harding Inaugural Chair in Global Child Health at the Hospital for Sick Children, Toronto, Co-Director of the SickKids Centre for Global Child Health a unique joint appointments. He also holds adjunct professorships at several leading Universities globally including the Schools of Public Health at Johns Hopkins (Baltimore), Tufts University (Boston), Boston University School of Public Health, University of Alberta as well as the London School of Hygiene & Tropical Medicine. He is a designated Distinguished National Professor of the Government of Pakistan and was the Founding Chair of the National Research Ethics Committee of the Government of Pakistan from 2003-2014. Dr. Bhutta also leads large research groups based in Toronto, Karachi and Nairobi with a special interest in research synthesis, scaling up evidence-based interventions in community settings and implementation research in difficult circumstances and conflict settings. In particular, his work with community health workers and outreach services has influenced integrated maternal and newborn outreach programs for marginalized populations all over the world.*

### ***Dr. Firas Jabbar Al-Mossawi***

*Dr. Firas Jabbar Al-Mossawi is currently the National EPI Manager in Iraq. He holds 20 years of Experience in the field of Public Health Field, focusing mainly on the Expanded Program on Immunization. He was an NTAG member between 2015 and 2017 alongside other posts. He holds a degree in Medical Science from the University of Baghdad as well as the Board of Community Medicine from the University of Al-Nabrian/ Medical College. In his biography he writes that he has always enjoyed the outcomes of his work to vaccinate the children in Iraq and it was always his optimum goals*

### ***Dr Ehab Basha***

*Dr Ehab Basha is an epidemiologist and he currently hold the position of National Vaccination Officer for the Expanded Program of Immunization in /Egypt. He is also a member of the national International health regulation committee and an FETP Mentor. Dr Ehab Basha holds a BSc in pharmacy from the university of Alexandria. He has also completed the Advanced Field Epidemiology Training Program from the Ministry of Health and Population in Egypt & CDC and holds a master's degree in Business Administration from Arab Academy for Science, Technology & Maritime Transport, amongst other certifications. Throughout his career, he has attended many international and national training programs in different areas of epidemiology and has participated in international conferences by giving poster and oral presentations.*

### ***Dr Salah Al Awaidy***

*Salah Thabit Al Awaidy is a Communicable Diseases Adviser in Health Affairs, Ministry of Health, Oman. He is a medical doctor and holds a Master's in Epidemiology. He is currently the adviser of Communicable Disease Surveillance, Elimination and Eradication of Communicable Diseases of Public Health Importance, EPI, vaccine supply chain system and IHR at the Ministry of Health, Oman. He was the Director of Communicable Disease Surveillance and Control at MoH, HQ, Oman between 1997-2011, IHR national focal point 2002-2013 and was a member in several of the professional committees namely: Strategic Advisory Group on Immunization (SAGE), WHO Geneva (2005-2007); Strategic Advisor Group on Vaccine and Store Management Training Courses (2005-2008), WHO Geneva; Strategic TB Advisory Board (STAG) 2007-2011 2014- till date. He also currently serves as IHR Emergency Committee on Polio and MERS-CoV, and has authored or been the co-author of over 35 publications on a large variety of health topics.*



## EMPHNET WEBi Series

### Countries' Strategies to Maintain Immunization Achievements During the Pandemic while Adapting to Post Pandemic

**Tuesday, July 7, 2020**  
17:00 to 18:30 Jordan local time (UTC+3)



**Dr. W. William Schluter**  
Director, Global Immunization Division,  
US CDC



**Facilitator**

**Prof. Zulfiqar Bhutta**  
Co-Director, Centre for Global Child Health,  
Toronto & Founding Director, Institute for  
Global Health & Development, The Aga  
Khan University, Pakistan



**Dr. Firas Jabbar Al-Mowsawey**  
EPI Manager /Iraq

**Dr Salah Al Awaidy**  
Communicable Diseases  
Adviser to Health Affairs /Oman  
& Ex-SAGE Member

**Dr. Ehab Basha**  
National Vaccination Officer,  
EPI /Egypt



#### The webinar will focus on

- 1- Highlighting the impact of COVID-19 on immunization at global, regional and country levels.
- 2- Understanding country situations, strategies, and progress in terms of resuming immunization activities.
- 3- Defining the needed support for the implementation of these strategies and plans

**Held in partnership with the Centers for Disease Control and Prevention (US CDC)**



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