Impact of COVID-19 on Routine Immunization, Liberia Case Study

Adolphus Trokon Clarke, Ministry of Health, Republic of Liberia

Routine immunization (RI) is a sustainable, reliable and timely interaction between the vaccine, those who deliver the vaccines (e.g. vaccinators) and the vaccines to ensure every person is fully immunized against vaccine preventable diseases. In order to determine the programmatic impact of the COVID-19 pandemic on RI, multiphase approaches are needed to discuss its impact on Liberia’s RI. Analysis of routine Health Management Information Systems (HMIS) data indicate a marked decline in immunization services notably between the months of March and May 2020. A comparative analysis of Jan-Jun 2019 vs 2020 showed a 16% decline for Penta 3 and Measles containing vaccine first dose (MCV1). This reduction was likely due to general fears about COVID-19; misinformation about the existence of a COVID-19 vaccination in Liberia; suspension of outreach sessions and rumors that a COVID-19 vaccine would be tested on people seeking routine immunizations. Given the communities’ growing scepticism and fear of vaccination services during the COVID-19 pandemic, and out of concern for the safety of the vaccinators, the EPI programme temporarily suspended routine immunization health facility community outreach services. To determine the level of impact which the myths, misinformation and rumors about vaccination services have had on the RI, a vaccine perception study was conducted in two Counties (Montserrado and Margibi) initially affected by the pandemic due to the travel restrictions that were part of the imposition of a state of emergency.

Findings from the vaccine perception study culminated into the development of a risk communication strategic action plan. This plan identified and delineated barriers hindering the optimal uptake of immunization services. Some of the issues identified were: misinformation about COVID-19; rumors and limited trust in vaccines (both routine and new); and delays in seeking vaccination services due to the COVID-19 pandemic. To address these, key messengers were mapped and appropriate messages developed, together with channels for communication, and responsible owners against each of these barriers. The plan was also organized into short, medium, and long-term priorities, based on the estimated impact of each action on increasing vaccinations. Being cognizant that the COVID-19 may or might not end anytime soon, the EPI Technical Working Group developed Infection Prevention and Control (IPC) Guidelines for health workers delivering vaccines, which contextualizes the WHO guidance on immunization activities in Liberia.

Furthermore, the resumption of routine immunization health facility outreach services began in late May 2020 with the aim of reducing the immunity gap being created by COVID-19 due to limited access to high quality routine immunization outreach services. In addition to addressing issues related to outreach, the EPI team has also worked to ensure that health facilities are strengthened to provide quality immunization services during the COVID-19 outbreak by providing: guidance on infection prevention and control (IPC) measures for vaccinators plus training, procurement and distribution of IPC materials; installation of 103 items of cold chain equipment (e.g. Solar Direct Drive, SDD) at health facilities to maintain the viability and integrity of the vaccines and the cold chain system; conduct of one round of periodic intensification of routine immunization (PIRI) in eleven Counties; and conducting additional supportive supervision. These activities have contributed to a gradual increase in immunization rates in the past three months with huge optimism of improvement in the coverage rates by December 2020.
Maintaining Paraguay’s Expanded Programme on Immunization in the Context of COVID-19

Soraya Araya and Luis Cousirat, Ministry of Health and Social Well-being in Paraguay, and Fabiana Michel and Mirtha Rodriguez, Pan American Health Organization in Paraguay

Within the framework of the COVID-19 pandemic, Paraguay’s Expanded Programme on Immunization (EPI) has implemented a series of measures aimed at maintaining the functioning of vaccination centers in the country with technical cooperation from PAHO/WHO and support from the country’s National Immunization Technical Advisory Group (NITAG). These measures included: developing technical operational guidelines based on PAHO/WHO recommendations; relocating vaccination centers outside of medical offices, or even outside of health services; scheduling the population for vaccination; and disseminating communication messages to promote the importance of vaccination.

Equipment and supplies, such as personal protective equipment, sinks, and tents serving as temporary vaccination posts in services with the highest patient demand that do not have sufficient infrastructure, have been provided to ensure compliance with infection prevention and control measures, environmental and hand hygiene, and social distancing. In the case of the Chaco departments, where there is greater demand from indigenous populations and limited availability of water, sinks will be provided and designed to avoid water wastage.

With these measures, 100% of vaccination centers can stay open and parents and caregivers can have their children vaccinated in safe environments. Immunization service interruption during the COVID-19 pandemic could lead to a resurgence of diseases like measles, polio, and others, that can be prevented with safe and effective vaccines. Paraguay has been free from these diseases for more than three decades. Additionally, if outbreaks from these diseases were to occur, the burden on health services would increase even more than it has due to the pandemic.

**Note**: Between April and June 2020, the EPI carried out seasonal influenza vaccination, aimed at protecting the at-risk population and reducing the burden on health services. More than 1,208,256 doses were administered using different strategies, and no COVID-19 cases have been reported related to this activity.
Country Report Template Validation for the Sustainability of Measles, Rubella and Congenital Rubella Syndrome (CRS) Elimination in the Americas

Desiree Pastor, Gloria Rey, Pamela Bravo, and Cuauhtémoc Ruiz-Matus, Pan American Health Organization, Washington, DC

Countries of the Region of the Americas are requested to present strong and compelling evidence regarding the sustainability of elimination in their territories and/or if they are ready to apply for re-verification of elimination, in the case of reestablishing endemic transmission.

As such, the Pan American Health Organization (PAHO) has developed a country report template to standardize the collection and analysis of evidence following the main components of the new Regional Framework for Monitoring and Re-verifying Measles, Rubella, and CRS Elimination, which was endorsed by PAHO’s Technical Advisory Group (TAG) on Vaccine-preventable Diseases in July 2019. Before being disseminated, the template was validated with 12 select countries within Latin America and the English-Speaking Caribbean in two separate online sessions.

In each session, managers from the immunization, surveillance, and laboratory technical areas were convened, in tandem with presidents of the National Sustainability Commissions (NSC) and the regional and national PAHO immunization advisors. Prior to the online meeting, PAHO sent participants the country report template and measles and rubella country profiles, which were filled out by PAHO with reported information on epidemiology, quality of surveillance, laboratory surveillance, and analyses of vaccinated population cohorts, through different official sources. The participants then were tasked with the following: 1) fill out the country profile template with their available national data and provide comments through a standardized format also provided by PAHO; 2) share feedback on the template with the NSC president and members in a written report; 3) prepare a 10-minute presentation for the online session.

Results from the validation yielded positive acceptance, given that the requested data is routinely collected and thus, available. Caveats included data from additional surveillance activities, such as active case finding and/or operational research (e.g., missed opportunity studies), which are not currently being conducted due to the COVID-19 pandemic. Countries agreed that the template collects all data required to document elimination sustainability and/or re-verification. They also recognized that the template would foster the use and correlation of national data, while addressing quality issues, tracking progress on sustainability activities implemented, and advocating for national resources for the sustainability of elimination.

Countries suggested that the template should describe the potential impact of the COVID-19 pandemic across the components of the Regional Framework, so that the plan of action for sustainability can address detected gaps in vaccination and surveillance. Countries also requested that when possible, data analysis should be done at the lower unit/sector (e.g., county, municipality/army forces, private sector) and that it should be expanded to include other political and socioeconomic indicators, such as humanitarian crisis or homicide rates, for a better root analysis of low vaccination rates and surveillance performance under high risk situations.

Finally, countries agreed on the importance of documenting the lessons learned from measles outbreak control measures amidst the COVID-19 pandemic, with the purpose of improving the integration of control activities that minimize transmission during these two events.

PAHO will officially send the report template in October 2020. Upon the countries’ request, the filled template will be submitted to PAHO on 15 June 2021, for revision and approval of the Regional Measles and Rubella Commission.
Integrated Supervision of Routine Immunization Activities And Surveillance Of Vaccine-Preventable Diseases In 8 Regions Of Niger, From 17 To 26 August 2020

Kaya Mutenda Sheria, Biey Joseph, Batoure Oumarou, Tombokoye Harouna, Gbaguidi Aichatou Diawara, EL Khalef Ishag, Haladou Moussa, Mocktar Mohamed Hakim, WHO Country Office, Niger

Niger has been facing the COVID-19 pandemic since 19 March 2020. This situation has prompted the Niger Immunization programme and its partners (WHO, UNICEF, Gavi and JSI) to provide health districts with a guideline for the continuity of immunization activities.

In this context, an integrated supervision mission of immunization activities was conducted with the financial and technical support of WHO from 17 to 24 August 2020 in the eight regions of the country to: (a) ensure the continuity of immunization services; and (b) advocate with the political-administrative and customary authorities to support immunization activities.

A questionnaire on different components of immunization was used followed by interviews, and after eight days of work, the following observations were made:

- Presence of motivated health workers to continue immunization activities despite the ongoing COVID-19 pandemic;
- Weak implementation of fixed, advanced and mobile strategies in the first half of 2020, with only 23% of sessions completed compared to the amount planned;
- Decreasing vaccine coverage for all antigens in the first half of 2020 compared to the same period in 2019 and 2018 (40% reduction);
- Observance of barrier measures during vaccination sessions;
- Enough protective equipment for health staff and investigation teams.

At the end of this supervision mission, recommendations were made to encourage the population to attend immunization services in observance of barrier measures.

Next steps:
- Advocate to parliament for resource mobilization for immunization.
- Monitor the implementation of recommendations.

Coalition Launches New PPE Initiative for Community Health Workers

VillageReach

The COVID-19 Action Fund for Africa (the Fund), a personal protective equipment initiative (PPE) for community health workers (CHWs), launched on 11 August 2020. The Fund pools the resources of over 30 organizations and 24 African governments to get PPE supplies to one million CHWs in order for them to keep safe and keep serving.

Working in partnership with Ministries of Health, the Fund is the only known effort to date to get PPE supplies to CHWs serving over 400 million people in Africa.

CHWs contribute to significant improvements in health priority areas, including immunization. In the absence of PPE, CHWs put themselves and the people they serve at risk; and if CHWs cannot do their jobs, there could be further disruptions in essential health services, which we know has profound consequences.

"We visit households. We advise women to take their children for immunizations. We advise women to start their antenatal care visits on time. We manage other cases, like malaria. We need PPE just like any other health worker so we can protect ourselves and our community" - Euniter Adoyo, community health worker supervisor, Lwala Community Alliance and Kenya Ministry of Health, Migori County, Kenya.

The Fund aims to raise $100 million to provide a one year supply of PPE to CHWs across 24 countries. First round shipments to 12 countries are already underway with the $12.5 million raised to date. This initiative is jointly organized by Community Health Acceleration Partnership, the member organizations of the Community Health Impact Coalition, Direct Relief, the member organizations of the Pandemic Action Network and Ministries of Health in 24 countries.

Learn more from the FAQs on the Fund website. Help spread the word on social media by using this toolkit.
Past Meetings/Workshops

Virtual Ad Hoc Meeting of PAHO's Technical Advisory Group (TAG) on Vaccine-preventable Diseases Held to Discuss COVID-19 in the Region of the Americas

Cuauhtemoc Ruíz Matus, Nathalie El Omeiri, Octavia Silva, PAHO-Washington, DC

Location: Virtual
Date: 4 August 2020
Participants: PAHO's TAG Members (Peter Figueroa, Jon Andrus, Pablo Bonvhei, Roger Glass, Arlene King, Nancy Messonier, Jose Ignacio Santos, and Cristiana Toscano), as well as staff from PAHO's Comprehensive Family Immunization (IM) Unit, PAHO's Incident Management System, Public Health Emergencies (PHE) Department, and Revolving Fund for Access to Vaccines (RFV) programme.

Purpose: To brief PAHO's TAG members on the current situation of immunization programmes in the context of the COVID-19 pandemic in the Region and present PAHO's progress in facilitating equitable access to COVID-19 vaccines and preparations for vaccine introduction and deployment.

Details: Presentations at the meeting covered the following topics:
- COVID-19 in the Americas – an epidemiological situation update
- Situation of immunization programmes in the Americas in the context of the COVID-19 pandemic
- Access to SARS-CoV-2 vaccines in Latin America and the Caribbean
- Regional guidance for planning the introduction of COVID-19 vaccines

These presentations generated lively discussion from the TAG Members, the recommendations from which will be published in the meeting’s final report. This final report is being finalized and will be published at this link.
Resources
NEW! WHO resources on Catch-up Vaccination
Stephanie Shendale, WHO Headquarters

Despite best efforts and intentions, individuals may not always receive all vaccinations in a timely manner as per the recommended age in a national immunization schedule. No one should miss out on the right to the protection that vaccines offer, simply because they are not able to access services in time.

A catch-up vaccination strategy is an essential part of a well-functioning national immunization programme and should be implemented on a continuous basis.

The importance of catch-up vaccination is more pronounced when there is an extended interruption of routine immunization services or delay of mass vaccination campaigns. While every effort must be made to keep immunization services functioning during emergency situations, unavoidable disruptions can result in large immunization gaps that may require additional specially planned catch-up efforts to address.

WHO EPI has published two new resources to support national immunization programmes and immunization partners to establish or strengthen strategies for catch-up vaccination.

1. Leave No One Behind: Guidance for planning and implementing catch-up vaccination is a foundational document that covers catch-up vaccination as an essential component of a strong immunization programme, outlining the basic system enablers required to allow and promote catch-up through routine immunization. The guidance also describes special catch-up activities that may be required following an interruption of services.

2. Closing immunization gaps caused by COVID-19 (PPT) aims to address the more immediate needs of prioritizing strategies for restarting immunization services and planning mass catch-up activities in the context of the ongoing COVID-19 pandemic. This resource highlights key considerations for planning and conducting various catch-up strategies during COVID-19 and makes reference, where applicable, to more comprehensive resources available.

These resources have been published as working drafts; feedback on their implementation will continue to be received and updates incorporated as needed. French translation is in progress.

The documents are available on the WHO website at this link and on TechNet.

Frequently Asked Questions (FAQs) about COVID-19 Candidate Vaccines and Access Mechanisms, 27 August 2020
Alba Maria Ropero, Alba Vilajeliu, Cuauhtemoc Ruiz Matus, Pan American Health Organization-Washington, DC

A document listing and responding to 23 frequently asked questions on the topic of COVID-19 candidate vaccines and access mechanisms and distribution.
Reporting gaps in immunization costing studies: Recommendations for improving the practice
Flavia Moi, ThinkWell

Poor reporting limits the understanding and use of immunization cost data. After conducting an extensive systematic review of published and grey literature, the Immunization Costing Action Networking (ICAN) identified common reporting problems and drafted a checklist to help researchers increase interpretability and use of immunization cost evidence.

This new publication describes quality assessment results and quantifies problems with immunization costing study reporting practices found in 68 articles and reports included in an immunization delivery unit cost repository focused on low- and middle-income countries and launched in 2018, the Immunization Delivery Cost Catalogue (IDCC).

In the form of an easy to follow checklist, a standard of practice for writing up an immunization costing study is recommended to increase the quality of reporting and the comparability of results. Reporting that adheres to this checklist will improve the comprehension and interpretability of evidence, increasing the likelihood that costing studies are understood and can be used for resource mobilization and allocation, planning and budgeting, and policy decisions.

French Version of the MLM online modules
Balcha Masresha, WHO AFRO

In addition to these various online courses and resources the FRENCH version of the AFRO online MLM course is available now. Our francophone colleagues are encouraged to make full use of these resources and to widely share the links with country programme staff.

1. The French version of the MLM online modules.
(Please note that it may work better with Chrome browser)

2. The WHO AFRO online MLM course in English.

3. The WHO online training modules on “Conducting high quality Measles-rubella SIAs”:

4. The Immunization Academy website, with hundreds of video clip resources on all aspects of immunization - available in English, French, Hausa and Kiswahili.

5. The WHO vaccine position papers.

6. Other materials are available on the BOOST platform.
Links

Organizations and Initiatives

American Red Cross
Child Survival

Centers for Disease Control and Prevention
Polio
Global Vaccines and Immunization

Johns Hopkins
International Vaccine Access Center
Value of Immunization Compendium of Evidence (VoICE)
VIEW-hub

JSI
IMMUNIZATION Basics
Immunization Center
Maternal and Child Health Integrated Program (MCHIP)
Publications and Resources
Universal Immunization through Improving Family Health Services (UI-FHS) Project in Ethiopia

PAHO
ProVac Initiative

PATH
Better Immunization Data (BID) Initiative
Center for Vaccine Innovation and Access
Defeat Diarrheal Disease Initiative
Vaccine Resource Library
Malaria Vaccine Initiative
RHO Cervical Cancer

Sabin Vaccine Institute
Boost – A Global Community of Immunization Professionals

UNICEF
Immunization
Supplies and Logistics

USAID
USAID Immunization
USAID Maternal and Child Survival Program

WHO
Department of Immunization, Vaccines & Biologicals
ICO Information Centre on HPV and Cancer
National programmes and systems
Immunization planning and financing
Immunization monitoring and surveillance
National Immunization Technical Advisory Groups Resource Center
SIGN Alliance

Other
Coalition Against Typhoid
Confederation of Meningitis Organizations
Dengue Vaccine Initiative
European Vaccine Initiative
Gardasil Access Program
Gavi the Vaccine Alliance
Global Polio Eradication Initiative
Immunization Academy
International Association of Public Health Logisticians
Immunization Economics resource
International Vaccine Institute
Measles & Rubella Initiative
Multinational Influenza Seasonal Mortality Study
Network for Education and Support in Immunisation (NESI)
Stop Pneumonia
TechNet 21
Vaccine Safety Net
Vaccines Today

WHO Regional Websites
Routine Immunization and New Vaccines (AFRO)
Immunization (PAHO)
Vaccine-preventable diseases and immunization (EMRO)
Vaccines and immunization (EURO)
Immunization (SEARO)
Immunization (WPRO)

UNICEF Regional Websites
Immunization (Central and Eastern Europe)
Immunization (Eastern and Southern Africa)
Immunization (South Asia)
Immunization (West and Central Africa)
Child survival (Middle East and Northern Africa)
Health and nutrition (East Asia and Pacific)
Health and nutrition (Americas)

Newsletters

Immunization Monthly update in the African Region (AFRO)

WHO/Europe Vaccine-preventable diseases and immunization (VPI) news (EURO)

Immunization Newsletter (PAHO)

The Civil Society Dose (GAVI CSO Constituency)

TechNet Digest

RotaFlash (PATH)

Vaccine Delivery Research Digest (Uni of Washington)

Gavi Programme Bulletin (Gavi)

Immunization Economics Community of Practice