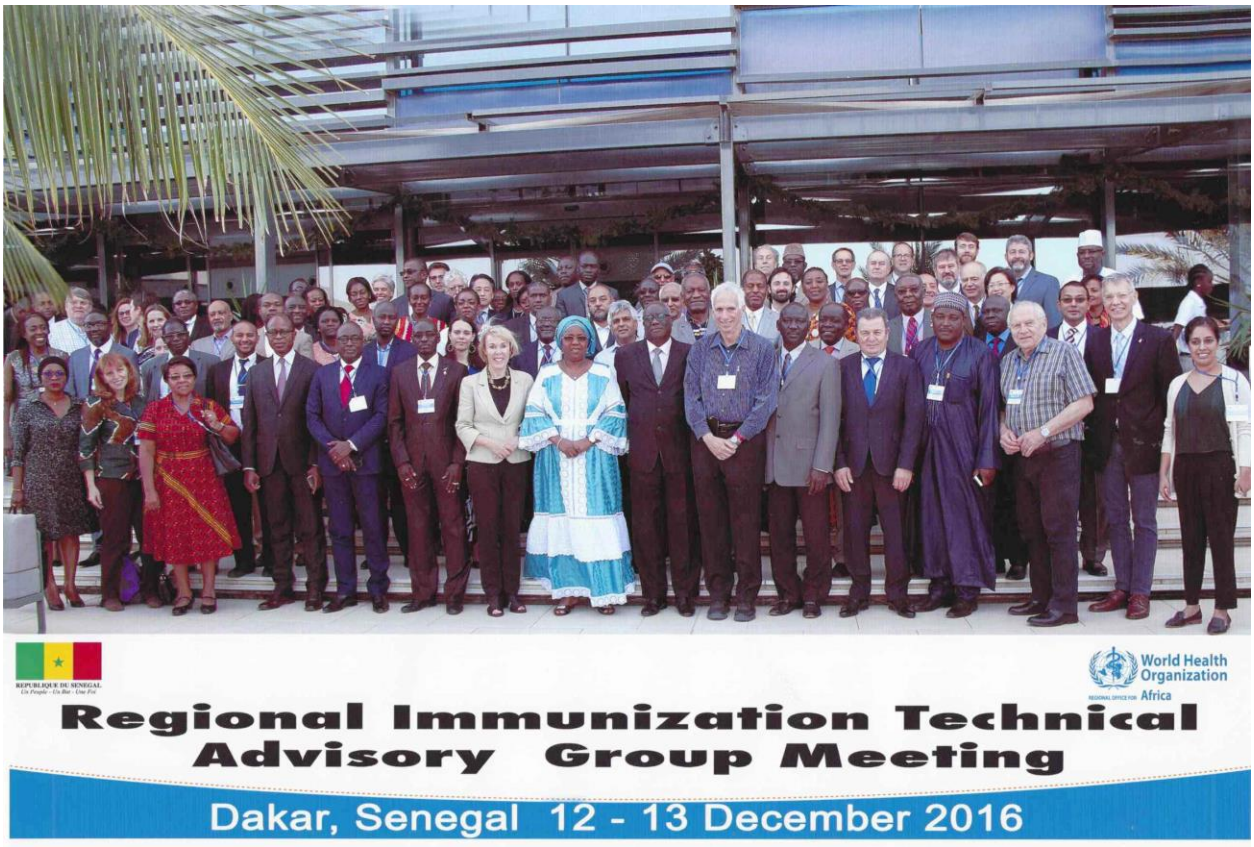
REPORT OF THE

REGIONAL IMMUNIZATION TECHNICAL ADVISORY GROUP MEETING



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ACRONYMS

ADI	Addis Ababa Declaration on Immunization in Africa
AFRO	African Regional Office
AFP	Acute flaccid paralysis
AGE	Acute Gastroenteritis
ANC	Ante-natal care
AVAREF	African Vaccine Regulatory Forum
BMGF	Bill and Melinda Gates Foundation
bOPV	Bivalent oral polio vaccine
CDC	US Centers for Disease Control and Prevention
cMYP	Comprehensive multiyear plans for immunization
CRS	Congenital Rubella Syndrome
CSF	Cerebrospinal Fluid
CSO	Civil society organizations
CTC	Controlled Temperature Chain
cVDPV	Circulating vaccine-derived poliovirus
DHF	Dengue Hemorrhagic Fevers
DHS	Demographic and Health Surveys
DOPV	Directly Observed Polio Vaccination
DQS	Data quality self-assessment
DQWG	Data Quality Working Group
DTP	Diphtheria-tetanus-pertussis [vaccine]
EPI	Expanded Programme on Immunization
EYE	Elimination of Yellow Fever Epidemics
FRH	Family and Reproductive Health
Gavi	Global Alliance for Vaccines & Immunization
GIS	Geographic Information systems
GPEI	Global Polio Eradication Initiative
GPS	Geospatial positioning system
GVAP	Global Vaccine Action Plan
HPV	Human Papilloma Virus Vaccine
HR	High Risk
HSS	Health systems strengthening
ICC	Inter-Agency Coordinating Committee
IDSR	Integrated Disease Surveillance & Response
IMCI	Integrated Management of Childhood Illness
JRF	The WHO UNICEF Joint Reporting Form
UNICEF	United Nations Children's Fund
LGA	Local Government Area
LMIC	Low and middle income countries
LQA	Lot Quality Assurance
MCIA	Ministerial Conference on Immunization in Africa
MCH	Maternal and Child Health
MCV	Measles-containing vaccine
MCV1	First dose of MCV
MCV2	Second dose of MCV
MNT	maternal and neonatal tetanus
MOF	Ministry of Finance
MOH	Ministry of Health
mOPV	Monovalent oral polio vaccine
MOV	Missed Opportunity for Vaccination
MR	Measles-rubella [vaccine]
MSF	Médecins sans Frontiers
NGO	Non-governmental organization
NIDs	National Immunization Days
NITAG	National Immunization Technical Advisory Group
NNT	Neonatal tetanus
NRA	National Regulatory Authority
OPV	Oral polio vaccine
PAB	Protection at birth
PAHO	Pan American Health Organization
PCR	Polymerase Chain Reaction
PCV	Pneumococcal conjugate vaccine
PID	Pneumococcal invasive disease
RCV	Rubella-containing vaccine
RED	Reaching Every District Approach
RITAG	Regional Immunization Technical Advisory Group
RV	Rotavirus Vaccine
SAGE	Strategic Advisory Group of Experts on immunization
SIAs	Supplementary Immunization Activities
tOPV	Trivalent oral polio vaccine
RITAG	Task force for Immunization
TBA	Traditional Birth Attendants
TT	Tetanus toxoid
VCMs	Volunteer community mobilizers
VHF	Viral Hemorrhagic Fevers
VPD	Vaccine Preventable Disease
YF	Yellow Fever
WHA	World Health Assembly
WHO	World Health Organization
WPV	Wild poliovirus

EXECUTIVE SUMMARY

The Regional Immunization Technical Advisory Group (RITAG) met in Dakar, Senegal at the *Radisson Blu* Hotel from 12th to 13th December 2016 for its second ordinary meeting of the year. Dr Deo Nshimirimana, the WR Senegal welcomed the participants on behalf of the Regional Director, Dr Matshidiso Moeti and the meeting was officially opened by the Minister of Health and Social Development, Senegal. Present at the opening and subsequent sessions were immunization partners and donors as well as representatives of civil society organizations, immunization staff from the countries and various levels of WHO (ISTs, Regional Office and Immunization and Polio Directors from HQ).

The primary goals of the meeting were to update the RITAG members on progress made in the programme, current priorities as well as levels of achievement of the recommendations from the previous RITAG meetings and to seek their advice and guidance on current specific challenges. Some of the recent priority areas in immunization in the African Region were discussed in sessions of the meeting after the brief presentations made by the secretariat. In these sessions, the progress made was summarized, challenges highlighted and the RITAG members given the opportunity to discuss and to provide advice. At the end, a number of key recommendations were made.

RITAG Recommendations:

1. RITAG RECOMMENDATIONS ON SUSTAINABLE IMMUNISATION PROGRAMMES AGAINST THE BACKDROP OF POLIO TRANSITION AND GAVI GRADUATION

1.1. Ensuring Alignment of Strategic Documents

RITAG notes with satisfaction the development of the roadmap to evaluate the Addis Ababa Declaration on Immunization in Africa (ADI). The RITAG notes also that there are now a number of strategic documents directing progress in immunization in the region for the next 5-10 years. To ensure coherence between new strategic documents pertaining to regional and national immunization programmes, it is important that each newly developed plan, roadmap, monitoring and evaluation framework be related to the Global Vaccine Action Plan (GVAP) and the Regional Strategic Plan on Immunization. This should include reference to human rights and rights of the child, national ownership and accountability, community demand and the integration of immunization services in a strengthened health system.

RITAG recommends that

- The drafted ADI roadmap is framed in this manner and is reviewed by the RITAG members before its finalization.

1.2. Polio Transition Planning

RITAG notes with concerns that there appears to have been insufficient coordinated planning for polio transition and also notes that in many countries polio resources are being used for services beyond polio eradication activities. Acknowledging that polio transition is inevitable and is imminent, urgent attention to better planning is required to avoid adverse impact on immunization, surveillance and emergency response programmes. RITAG also supports the work WHO/AFRO has embarked on to develop a WHO business case for immunization for the African Continent and has taken note that this business case will aim to ensure sufficient commitment of resources for WHO to continue to support Member States on the African continent achieve the GVAP targets as the Global Polio Eradication Initiative (GPEI) ramps-down and closes and Gavi support phases out over the coming years as countries on the African continent transition out of Gavi support.

RITAG recommends that:

- A detailed programmatic risk analysis (assessment & mitigation) be conducted on the projected impact of the GPEI ramp-down and closure and Gavi transitioning, on immunization programmes & disease surveillance systems in the African region. Gavi & other development partners to consider commissioning this study.
- An independent assessment of countries' requirements post-polio transition be supported by donor partners. This should include a human resource development and redeployment plan.

1.3. Immunization Coverage

The RITAG is deeply concerned by the stagnation of the regional immunization coverage over the past 5-7 years, the persistently very low coverage in a small number of countries, the more recent decline in coverage in other countries and the growing threat that emergencies pose to immunization coverage.

The RITAG recommends that:

- In the next 12 months, WHO/AFRO undertakes an in-depth country or sub national studies to determine reasons for this stagnation, understand key drivers of immunization coverage trends, inform strategies with measurable indicators and time frames for member states to improve on their immunization coverage.
- WHO/AFRO and UNICEF work with countries to develop strategies to strengthen meaningful participation of communities, civil society organizations and the private sector in promoting routine immunization.
- WHO/AFRO and UNICEF compile and share best practices in community based and led surveillance and monitoring including use of community registers, for use by district and frontline health staff.
- WHO/AFRO and UNICEF provide guidance for district and frontline health staff to foster community planning and action to promote immunization as part of community delivery of child and family health services.

2. RITAG RECOMMENDATIONS ON YELLOW FEVER

2.1. Implementing the Elimination of Yellow Fever Epidemics (EYE) Strategy

The RITAG recognizes that while it is not possible to eradicate yellow fever, elimination of epidemics is feasible and is essential against the backdrop of global warming, the changing distribution of Aedes aegypti, migration and urbanization. The RITAG notes the recent successful curtailment of yellow fever outbreaks in Angola and DRC and the prevention of outbreaks developing in Kenya and China following exportation from Angola. The RITAG appreciates the efforts of the countries supported by WHO, UNICEF and partners in achieving this goal. RITAG strongly endorses the newly developed WHO strategy for the Elimination of Yellow Fever Epidemics (EYE) strategy. The RITAG supports the development of the Regional Implementation Framework currently in progress and notes that a proposed Preventive Campaign Schedule for at risk countries that WHO AFRO is developing as part of this framework.

RITAG recommends:

- Countries that have undertaken risk assessments should implement actions outlined in the EYE strategy appropriate for their level of risk. This is particularly urgent for countries at high risk. For countries that have not yet undertaken risk assessment this should be urgently conducted with support of WHO, UNICEF and partners.
- The regional implementation framework and responses must include community involvement strategies for Yellow Fever surveillance, outbreak response and prevention.
- The proposed preventive campaign schedule should be based on country's risk assessment and projected needs and should be endorsed by countries and the vaccine stock required to support the schedule should be evaluated.
- The Regional Implementation Framework should be reviewed by RITAG in January 2017 and presented to the Regional Programme Sub Committee (PSC) in April, 2017.
- WHO AFRO should aim to present the draft Preventive Campaign Schedule to RITAG for review at the June 2017 RITAG meeting.

2.2. Strengthening Yellow Fever Coverage as Part of Routine Immunization

The RITAG notes that the low routine immunization coverage of Yellow Fever vaccines contributed to the recent Yellow Fever outbreaks and poses a significant risk for future epidemics. Despite adequate supplies of yellow fever vaccine for routine immunization programmes being available, of the 34 at-risk countries, 12 countries have low immunization coverage (<70%), six countries have moderate coverage (70-80%) and there is no yellow fever vaccine in routine immunization in 11 at risk countries. This situation will lead to a growing

cohort of unvaccinated children. As yellow fever vaccines are offered on the same schedule as measles vaccine, it is unclear why coverage is lower than measles in some countries.

RITAG recommends:

- In the context of routine immunization, WHO/AFRO should work with countries to implement a research agenda exploring why yellow fever immunization does not meet targets. Resulting data should be used to develop national strategies to address identified obstacles.
- WHO/AFRO and UNICEF should work with high-risk countries without yellow fever vaccines in their EPI programs to introduce the vaccine.

2.3. Yellow Fever Fractional Dosing Strategies

Currently SAGE recommends that fractional dosing of Yellow Fever vaccines can be used in outbreak settings when vaccine supplies are limited. This recommendation is based on limited clinical trial data that suggests that fractional dosing is a safe and effective strategy. In the recent Yellow Fever outbreak in Kinshasa, the limited yellow fever vaccine stockpile and the size of the population requiring immunization (around 10 million people) necessitated the use of a fractional dosing strategy. At the time, the plan was to re-immunize those who had received a fractional dose with a full dose after one year. However, there is now an ongoing study in Kinshasa to evaluate the safety and immunogenicity of fractional dosing up to one year post vaccination and the results will be available later in 2017.

RITAG recommends:

- Once the clinical trial data are available in 2017, that the data are urgently submitted as a peer review publication and that SAGE reviews the data and makes further recommendations on the need or otherwise for a repeat full dose of Yellow Fever vaccine following fractional dosing.
- WHO/AFRO develops a communication strategy for the Democratic Republic of Congo (DRC) government and to the community, addressing why the implementation of a full dose of yellow fever vaccine at one year may be delayed or may not be required.
- Noting the exportation of yellow fever virus from Angola to China and Kenya during the recent outbreak, the IHR 2005 requirement for the use of a full dose of Yellow Fever vaccine with supporting certification must be enforced. The EYE strategy recommendation of double-checking travelers upon entering into or arriving from an at-risk country must be enforced. Travelers, who had previously received only the fractional dose of the Yellow Fever vaccine during the campaigns, must receive the full dose of Yellow Fever vaccine before travelling. All countries must enforce and monitor implementation of IHR requirements on Yellow Fever.

- WHO/AFRO sensitizes regional NRAs on the use of fractional dosing and the SAGE and RITAG recommendations

2.4. Yellow Fever Vector Control

In the July 2016 RITAG meeting, RITAG recommended that lessons on vector control in Brazil should be shared with Angola and this was done. However, it remains unclear whether vector control strategies across the region are being driven by potentially duplicative pathogen specific programmes (e.g. Dengue, malaria) rather than being integrated.

RITAG recommends:

- WHO AFRO should review all current vector control programmes and produce guidance for entomological monitoring and integrated vector management, taking into account existing vector control activities. Viral amplification in vectors should be introduced into selected regional laboratories to strengthen surveillance and improve prediction of yellow fever outbreaks.
- If not already in progress, WHO Geneva should consider the development of a rapid diagnostic test for yellow fever.

3. RITAG RECOMMENDATIONS ON POLIO

3.1. Intensifying Polio Eradication Efforts.

The Nigerian experience showed that in inaccessible areas where surveillance and vaccination activities were not conducted due to insecurity, it is possible for wild poliovirus to circulate undetected for 4-5 years. Due to the many population movements in the region (migrant populations, nomadic, traders, internally displaced persons and refugees), there is an increased risk of polio circulation beyond Nigeria and into the Lake Chad region, Central African Republic (CAR) and beyond. In addition, because of low immunization coverage in the region, wild poliovirus and circulation vaccine derived poliovirus (cVDPV) cases have occurred in otherwise stable countries such as Chad, Angola and Madagascar.

RITAG recommends:

- WHO AFRO should work with countries with inaccessible areas and/or low routine immunisation coverage, to undertake the risk assessments and implement initiatives to strengthen surveillance and vaccination activities by first quarter of 2017.
- Due to the risk of importation of polioviruses from countries with continued transmission, WHO should assist countries to intensify activities to strengthen active and passive surveillance, including use of Geographical Information System (GIS) technologies to provide evidence that these activities are being carried out. Evidence of improvement in surveillance should be presented to the July 2017 RITAG meeting.

- WHO AFRO should support countries to increase vaccination of targeted children by mapping migratory routes and intensifying transit vaccination and synchronized cross-border activities.

3.2. Accelerating Laboratory Containment

The RITAG notes with concern the reluctance by some countries to finalize the documentation of phase 1b laboratory containment with destruction of polioviruses and potential poliovirus infectious materials. RITAG regards this non-compliance as a threat to the timely completion of the eradication schedule and a risk for re-introduction of polioviruses.

RITAG recommends:

- WHO AFRO continues to support countries to complete this process and that RITAG members use their local and regional contacts to advocate for the completion of laboratory containment activities

3.3. Ensuring IPV Supply for Risk Countries

The RITAG was informed that because of the globally deteriorating Inactivated Polio Vaccine (IPV) supply situation, the GPEI programme is no longer in a position to ensure that all countries in the tier 2 category of risk continue to receive uninterrupted supplies of IPV. The SAGE has recommended that all infants in tier 1 and 2 countries receive some IPV vaccine and that fractional intradermal dosing is acceptable in these settings.

RITAG recommends:

- All tier 2 countries in the African region should adopt a fractional injectable device (ID) dose strategy to ensure maximum possible coverage with the limited quantities of IPV available. This can be done with a two ID fractional dose schedule administered at 6 weeks and 14 weeks starting as soon as possible in 2017. An alternative would be for the country to postpone IPV vaccination to 2018 and then conduct a campaign using one fractional dose IPV to prime the cohort of children not vaccinated with IPV.
- WHO AFRO requests Gavi to consider support the introduction of the IPV fractional dose schedule through the provision of ID syringes and ID adapters and grants for changing vaccine presentations.
- The GPEI programme should explore support for SIAs for countries that are not Gavi eligible.

4. RITAG RECOMMENDATIONS ON MNTE

4.1. Creating Strategies and an Investment Case to complete MNTE

The RITAG notes that the AFRO region has committed to a maternal and neonatal tetanus (MNT) elimination target by 2020 but 7 countries have yet to achieve elimination and there is a global funding shortfall. RITAG also noted that as MNT occurs in the poorest communities including those that are hard to reach, MNT should be regarded as an indicator of inequity in the context of the SDGs. In addition, recent cases of tetanus resulting from male circumcision in older boys/men have revealed an immunity gap requiring strengthened routine immunization for girls and boys. RITAG also noted that MNT elimination has been most effectively achieved in settings where immunization and pregnancy interventions are integrated and there is a comprehensive approach to implement MNT elimination measures. RITAG recognizes that a comprehensive strengthened surveillance strategy for countries post elimination and those yet to eliminate is required.

RITAG recommends:

- WHO HQ to fast track the development of the MNT elimination investment case and resource mobilization strategy, within the context of equity and health systems strengthening, to secure predictable and timely funding to support countries to achieve and maintain MNT elimination.
- WHO AFRO to develop a detailed, practical and budgeted Regional plan (2017 – 2020) for resource mobilization and focused programme implementation to achieve and maintain MNT elimination in the Region by 2020.
- Countries to utilize all possible opportunities including Gavi HSS funding and GPEI resources to assure that MNT surveillance is conducted and data are used for program action.
- Noting that in some countries a siloed approach to programmatic funding (e.g. through EPI or MCH) is affecting optimal delivery of MNT elimination interventions, WHO AFRO and UNICEF to support countries to develop national plans for the achievement and maintenance of MNT elimination with clear roles for the national immunization and reproductive health programmes, and appropriate channeling of funding flows.
- WHO and partners to identify a champion / ambassador for the MNT elimination program to help scale up advocacy efforts and mobilize resources.
- WHO AFRO to explore the possibility of renewing MOH commitments for MNT elimination at the highest level, possibly by tabling the issue at the Regional Committee Meeting.
- WHO AFRO to work with partners to support a new post in AFRO with a full-time focus on MNT elimination programmes and broader tetanus issues.

- WHO and UNICEF HQ to scale up efforts to work with the vaccine manufacturers to support the manufacture and supply of TT in Uniject to widen programmatic opportunities in remote and hard to reach populations.
- Noting Gavi's prioritization of equity, Gavi to consider including Td in its 2017 VIS review and to also review HSS funding for countries who have yet to eliminate MNT and those who have recently achieved elimination.
- WHO and UNICEF to support countries to:
  - Review and adjust their routine immunization schedules to ensure tetanus protection over the life course and in both sexes noting that this will reinforce the importance of both the second year of life platform and a pre-adolescent or adolescent platform linked to HPV vaccination. The schedule should include 3 priming doses in infancy and 3 booster doses in childhood/ adolescence to be given preferably during the 2nd year of life, at age 4 – 7 years, and at age 9 – 15 years and ensure that doses received are documented.
  - Shift from TT to Td formulation as the preferred option for children $\geq$ 4 years.
- WHO and UNICEF to support countries to utilize the existing Integrated Disease Surveillance Strategy, to improve the quality of monitoring, case investigation, and reporting of tetanus cases to improve programme performance.
- For countries that have achieved elimination, WHO and UNICEF to support countries to undertake annual data reviews of maternal and child health and EPI district performance, and identify and intervene in districts at high risk of an increase in MNT cases, where feasible, serosurveys should be used to validate assessment of identified risk.
- MNT risk assessment is used together with UNICEF's equity assessment exercise to frame MNT elimination strongly as an equity issue, and implement corrective programmatic actions.
- As elimination comes nearer and the AFRO region poses a risk to achieving this goal, that RITAG receives reports on progress to polio eradication every year.

5. RITAG RECOMMENDATIONS ON MEASLES ELIMINATION AND RUBELLA CONTROL

5.1. Accelerating Measles Elimination Efforts and Rubella Vaccine Introduction

The RITAG notes that the AFRO region has committed to a 2020 target for measles elimination. The RITAG is concerned about the current uneven progress and challenges for measles elimination with the majority of countries in the region failing to reach 90% coverage for first dose of measles containing vaccine (MCV1) and with much lower coverage for second dose of measles containing vaccine (MCV2). RITAG also notes that to date only 17 AFRO countries have introduced rubella vaccine and while more countries have applied for Gavi funding to introduce rubella vaccines, it remains premature for the region to consider a rubella elimination

target at this time. However, RITAG notes that while rubella and Congenital Rubella Syndrome (CRS) surveillance is very weak, there is currently a CRS surveillance study being undertaken in 7 countries in the region, and the data being generated will be used to advocate for rubella introduction. The RITAG regards the success of measles immunization programmes as a sensitive indicator of effective routine immunization systems and of an effectively functioning health system. The RITAG recognizes that there is no appetite among donors to commit to a vertically driven measles eradication programme similar to polio, but believes that attainment of measles elimination in the region would be a strong indicator of strengthened routine immunization programmes and effective health systems. The RITAG is also concerned that the withdrawal of polio eradication funding could further weaken routine immunization systems and progress towards measles elimination if not properly managed. While the region is not nearing elimination yet, there is merit in establishing a Regional Verification Commission, as this could provide guidance, oversight and advocacy in support of the elimination efforts in the region. The RITAG greatly appreciates and provisionally endorses the Mid-Term Review of the Measles Programme subject to incorporation of inputs from the RITAG members.

RITAG recommends:

- RITAG members provide inputs on the Mid-Term Review by 20 December 2016, to allow the external mid-term review team to finalize and submit the report by the 29th December 2016.
- WHO AFRO should:
    - Develop a budgeted action plan for the implementation of the recommendations of the Mid-Term Review for both WHO AFRO and for countries.
    - Support countries to develop plans for the implementation of these recommendations with a focus on laboratory support and surveillance. Those plans should be integrated in the country annual and multi-year plan for immunization. Gavi eligible countries should be encouraged to use HSS funding to support surveillance and laboratory activities.
    - Develop a monitoring and evaluation plan consistent with GVAP, the Regional Strategy and the ADI.
- WHO AFRO to work with countries to expand the CRS Sentinel surveillance network in the Region, use available data for wider advocacy, and to promote the introduction of rubella vaccines by Member States.
- WHO AFRO to establish a Regional Verification Commission for measles elimination and for the 7 countries nearing elimination, WHO AFRO should assist countries in setting up national verification committees tasked with the responsibility of compiling evidence, and supporting advocacy for measles elimination.

1.0 BACKGROUND

This is the second of the two regular meetings of the Regional Technical Advisory Group (RITAG) on immunization in the African Region in 2016. The goal of this meeting was to appraise the performance of the immunization programme since the last meeting in June 2016. Consequently, the implementation of the action points from the last meeting were scheduled to be reviewed along with the review of other programme implementation performances. The level of progress and challenges were also marked for review with suggestions given for remedial actions where necessary.

Specifically, the meeting was called to, among other things; apprise RITAG members on level of successes in implementation of the recommendations from the last meeting. The broad topics discussed include polio eradication in the African Region and planning for polio legacies post eradication as well as measles rubella elimination strategies for the African Region. Others are elimination of Yellow Fever Epidemic (EYE) and maternal and neo-natal tetanus (MNT). There were also issues presented to the RITAG as information, namely update on status of implementation of RITAG Recommendations, progress report on immunization coverage and equity in the WHO African Region as well as improving immunization coverage through the equity lens and Addis declaration on immunization – Roadmap development.

The report presented here presents a detailed account of the meeting and its key achievements.

2.0 OPENING CEREMONIES

The WHO Representative for Senegal, Dr Deo Nshimirimana, welcomed participants to Dakar, Senegal for the RITAG meeting. He thanked the Senegalese authorities and in particular the Minister of Health and Social Development for her consistent readiness to accommodate WHO meetings, and to support the regional and world activities by WHO and other partners. He also thanked the Regional Director WHO in the African Region, Dr. Moeti Matshidiso for authorizing the hosting of this important meeting in Dakar.

The opening ceremony of RITAG December 2016

The RITAG serves as an independent advisory group of the WHO Regional office for Africa charged to provide strategic recommendation in the field of vaccines and immunization. It gives advices and recommendations to the Regional Director in relation to the policies and strategies on immunization, research and development of the vaccines and technology, among others. Dr Nshimirimana noted also that the mandate of the RITAG is not limited to the immunization of the children, but relates to all the diseases with vaccine prevention and all the age groups.

In the past immunization programmes focused on the infants and a limited number of traditional vaccines. Today, the world of immunization has evolved. We now have the development and the availability of many new vaccines targeting various age groups, the emergence of new technologies, the increase in the vigilance of the public for the questions of vaccine security, the reinforcement of the procedures of regulation and approval of the vaccines, the need to widen the vaccine calendar by taking account of all the age groups and the populations at risk are as many subjects which claim a very detailed attention. The key of the improvement of immunization systems and the sustainable introduction of new vaccines and technologies of vaccination is, for the countries, to make sure that they have the evidence necessary and have transparent procedures which allow a decision making. He called for the prioritization of immunization programme, the development of new strategies and in the introduction of the new vaccines and technologies.

He further noted that the recommendations that will result from the 2 day meeting of the RITAG will be used for directing the actions of the countries in reinforcing immunization activities and monitoring of the diseases for the reduction of the morbidity and mortality of children < 5 years and thus accelerating the realization of the Sustainable Development Goals (SDG). He ended by wishing the participants fruitful deliberation.

Professor Helen Rees, the Chair of the RITAG also thanked the Minister for gracing the occasion with her presence despite the public holidays. She lauded the minister for her career as a distinguished scholar and administrator. All the same, she noted that coming into the room this morning, she was struck by the extra-ordinary energy in the room and the presence of men and women poised for work.

Professor Rees also acknowledged the RITAG members and also expressed her excitement about what the committee will do in strengthening immunization. She noted that if the group can mobilize the communities and gets the people to embrace immunization and demand immunization services it would have strengthened immunization, especially as it concerns equity.

On his part, Dr Richard Mihigo, the Immunization and Vaccine Development (IVD) Programme Coordinator thanked the WR for the kind words and encouragement. He reiterated the gratitude of the AFRO leadership for his hosting the RITAG. He also thanked the minister profusely for making time to be with the group and declare the meeting open. He then took the Minister and the participants through the programme of work for the two days before inviting her to officially declare the meeting open.

Declaring the meeting open, the Minister of Health and Social Development in Senegal noted that it was a great pleasure for her to be present in the house. She expressed her delight in seeing some familiar people in the audience and also given the great honour to declare the meeting open. She thanked WHO and its partners for the decision to hold the meeting in Senegal. She welcomed all the participants on behalf of the President and encouraged participants to make themselves at home.

Before formally declaring the meeting open, she took opportunity of her recognition to reiterate her gratitude to the immunization group for the onerous tasks they have engaged in. She noted the contributions of UNICEF and Gavi and other great immunization partners. She emphasized that immunization is pivotal in health because of its ability to prevent diseases and save lives. She also stressed that the originality of the RITAG meeting stems from its focus on matters that are not only topical but engage the international community especially the Sustainable Development Goals (SDG).

She noted that Senegal, like other countries subscribe to this initiative. According to her, immunization saves life and prevents morbidity and mortality. She stressed that a lot of progress has been made in the introduction of new vaccines and improvement in coverage. She mentioned that her country is exploring other options to increase access and enhance equity. She encouraged the RITAG to look into the issues of Human Papilloma Virus (HPV) because the women are suffering from cervical cancer. She called on the RITAG to look at infant mortalities, polio and measles. She noted that in Senegal there is a re-emergence of measles.

She also enjoined members to consider issues of sustainability. She noted that there are obstacles that must be overcome to promote equity and increased coverage. Some of these challenges include availability and affordability of vaccines. She advised that while Gavi is negotiating with UNICEF, the immunization programmes in the Region should begin to consider the situation of countries graduating from Gavi support. She encouraged the AFRIVAC initiative to help with cost of vaccines. According to her, AFRIVAC will help mobilize resources for vaccine but there is still need to think of other innovative options for vaccine financing.

Given the attraction of the topics, she regretted that she will not be able to sit through the sessions and listen to the practical hands-on recommendations. She however assured the RITAG of her support and resolved to examine the recommendations that will emanate from the meeting to improve immunization. On this note she declared the meeting open and again thanked the RITAG for the choice of Senegal for this meeting.

3.0 TECHNICAL SESSIONS

3.1 Overview

During a technical session in the RITAG 12-13 December, 2016.

The primary goal for this meeting is to assess the performance of the immunization programme in the African Region in delivering services to protect the populations of Africa, and indeed the world, against vaccine preventable diseases; discuss challenges and seek expert orientation, from the RITAG members, on how to better deliver on WHO mandate to the people of the region and the world. Of particular interest were broad issues like polio eradication in the African Region and planning for polio legacies post eradication as well as measles rubella elimination strategies for the African Region. Others are elimination of Yellow Fever and maternal and neo-natal tetanus. There were also issues presented to the RITAG as information, namely update on status of implementation of RITAG Recommendations, progress report on immunization coverage and equity in the WHO African Region as well as improving immunization coverage through the equity lens and Addis declaration on immunization – Roadmap

A total of 12 technical presentations were made. Three of these were for information while nine were made for RITAG decision and recommendations. The presentations provided participants with the necessary background information on the status of immunization and key vaccine preventable diseases (VPDs) in the African Region. The presentations were followed by discussions leading to actionable recommendations. The presentations, highlights of subsequent discussions and the recommendations are summarized below.

3.2 Information

Update on Status of implementation of RITAG Recommendations

Dr Masresha Balcha, WHO/AFRO

There were 28 action points from the June 2016 RITAG meeting. Of these two were fully achieved. Another 2 were not achieved while 24 others were in progress because activities addressing these recommendations are continuous. The presenter then proceeded to details of actions taken to implement the recommendations in the areas of immunization coverage and equity; polio eradication; vaccine regulation and universal health coverage. Others recommendations were related to measles and meningitis elimination.

Immunization Coverage & Equity

Action Points	Status	Comments
Countries, especially those reporting high immunization coverage, should **triangulate available data to improve the accuracy of population immunity estimates.**	In progress	Developed the Regional data quality strategy • Development of countries strategic and annual data quality improvement plans following a system and DQR with clear monitoring and evaluation mechanisms • Establishment of national Data Quality teams in countries (EPI, HIS, National statics offices, partners,…) • Integration of immunization program requirements into integrated HIS such as DHIS2 platform • Support countries in this process (16 countries already trained)
WHO AFRO to **expand research agenda** to include the development of new diagnostic tools, mapping, population denominator estimates, and innovative vaccine delivery strategies.	In progress	*Strategic framework for research and development in immunization is underway. Prioritization of research agenda being done.*

Figure 1: Status of implementation of some action points from last RITAG June 2016

Comments and observation

RITAG members noted that the steps taken in the implementation of the recommendation were not clear and the term 'in progress' seem too fluid. For instance they wondered what steps will be taken for the mobilization of resources. This should be linked to the Regional strategy. They also expressed concern about the issues of data quality which seem to be persistent and are not going to go away. RITAG Members demanded to see steps taken by the organization to support countries to improve data quality.

They also emphasized on some of the emerging issues on human resources from polio eradication initiative. Thus members wondered how RITAG can capture some of the points made to reach the remaining targeted persons, given the polio transition.

On non-implementation of the Brazzaville initiative due to lack of funding, the Director of Polio programme in WHO/HQ explained that there has been delay in funding due to administrative issues. He however stressed that the funds are there and warned that we cannot afford the delay because surveillance is critical

Progress Report on Immunization Coverage in the WHO African Region

Dr Richard Mihigo, WHO/AFRO

The presenter opened the presentation by noting that though immunization has recorded significant improvement since 1988 it has however stagnated in the last five years. He noted for instance that polio eradication had come a long way. The recent cases in Nigeria however are a wake-up call and warning that we are not yet there. The same is the case with measles. He lamented that the Region is off track on most of the GVAP targets. A number of factors have had negative impacts on the immunization coverage. Examples are Ebola Outbreak, YF outbreak, security challenges, etc.

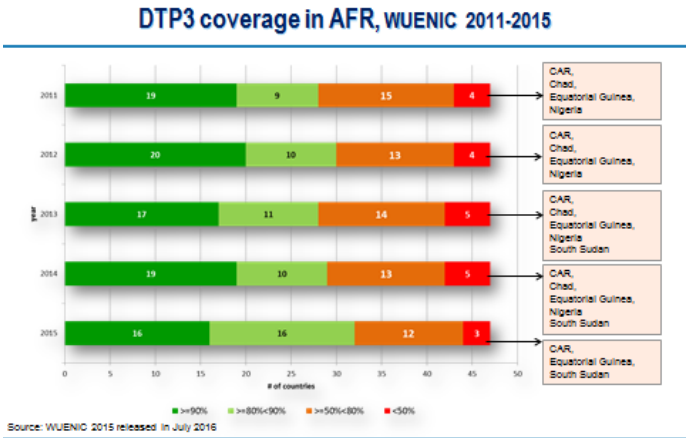

Figure 2: Trend in Immunization Coverage

He presented data showing that 1/3 of the countries have had improved coverage but majority of the countries are not making enough progress. Only 7 countries have so far maintained coverage of >80% in all districts. There are huge gaps especially in terms of equity. He stressed that nothing has changed in terms of unvaccinated children, despite the slight decrease in number of unvaccinated children in the Region.

One area where the Region has made progress is in the introduction of new vaccines. Network has been established in 31 countries on Rota surveillance. There is evidence of positive impact of new vaccine introduction, Acute Gastroenteritis (AGE) admission fell by almost 50% after the introduction of Rota in Rwanda for instance. Similar data for pneumococcal vaccine do also exist.

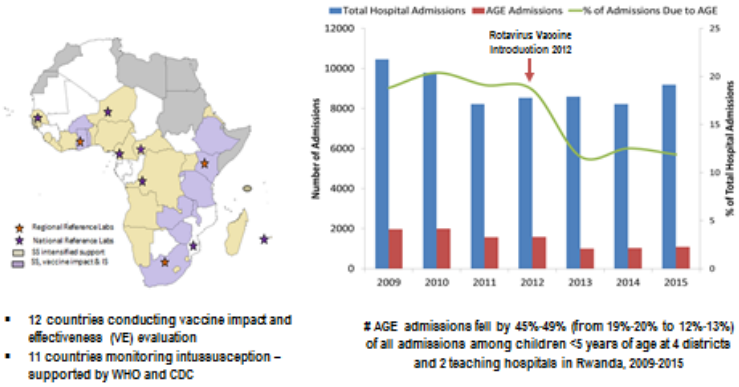

Figure 3: Evidence of new vaccine introduction impact

On data quality, the presenter noted that the secretariat will take steps to focus on the recommendation of RITAG in that regard. He stressed that the WHO/AFRO Secretariat is working closely with WHO/HQ in this respect. He reported that the WHO/AFRO has put together a Regional Data Quality Group in collaboration with WHO/HQ. He also reported that

the Region is working closely with other immunization partners to support countries in improving data quality. In his words, "we have also tried to link up with the colleagues working in the DHIS2 platform. We want to get immunization data integrated into that platform".

On vaccine stock out, he noted that the latest data on JRF indicate that countries still experience stock out. The good news, however, is that we are beginning to see improvements. He noted that efforts have been made to see if the stock out interrupt service and the results show positive association between stock out and interruption of services, thus this will be taken seriously.

One other area of focus is AEFI case monitoring. He reported that there are 25 countries with systems in place to monitor AEFI cases. Most of the cases seem to appear in a few countries. But the truth is that many countries are not reporting cases. It is thus important that we support countries to build strong AEFI systems

In terms of funding he lamented that very few countries fund adequately their immunization programmes. He noted that a huge proportion of the countries in the Region fund <50% of the vaccine or immunization costs. Many depend on Gavi funding. This is not sustainable as the Gavi funds will eventually come to an end someday.

Some of the challenges countries are facing include:

- Inadequate country ownership particularly the political commitment to fund and support their immunization.
- A number of countries have their GDP increasing and graduating out of Gavi support
- In terms of SDG, it is important to strengthen immunization system. Efforts have been made to engage colleagues in civil society organizations. To support countries to own their immunization programme.
- Integration is also a challenge particularly as the SDGs become key focus of programming.

Figure 4: Way Forward for Addressing Challenges to Immunization Coverage and Equity in AFR

Improving Immunization Coverage through Equity Lens

Dr Rene Ekpini, Regional Adviser Health UNICEF WCARO

Dr Ekpini, the presenter, called on participants to forget numbers but think of men, women and children in villages that we work for. He asked how do we achieve coverage without involving them and argued that we need to reposition the communities. If RITAG will make recommendation to reposition communities as actors and not receivers then a lot would be achieved.

Figure 5: Community and its people served by immunization services

To achieve high coverage there is need to have a number of key factors in place. These include availability, accessibility, acceptability, contact and effectiveness. Every component has the dimension of equity meaning that everybody has access to services.

He noted that child and neonatal mortality have reduced considerably. All the same there are still the equity issues. Today we know deaths are more where mothers have low education etc. The gaps that exist between the poorest and the richest have implication for coverage and equity. In some cases the gap is widening. Again, he asked, how can we talk of global access without talking of equity?

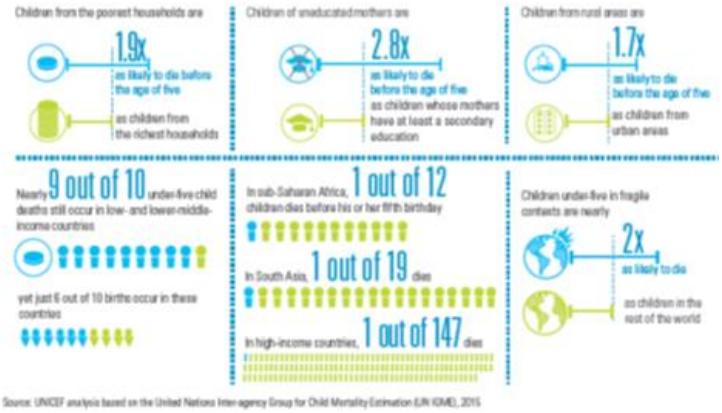

Figure 6: Disparity in child survival despite progress in service delivery

Out of the 8 countries with reduction in coverage, 6 are in West and Central Africa. Where there is stagnation, there is need to note that there is a considerable equity challenge to move from 80% to 90%. There is need to be vigilant when it comes to equity component of service delivery.

He further argued that the major bottle necks include some decisive elements of equity namely socio-cultural, economical, geographical, humanitarian and emergency all due to poor local governance and community accountability. He emphasized that we need to translate our recommendation to action. There is thus the need to strengthen communities to put governance

and community accountability in place to task the programmes to deliver. There is also poor organization of resources and services delivery to reach every child, the lack of integration leading to MOV; inadequate immunization cold chain and logistics management systems. We also have the problem of data management systems with inaccuracy

With regard to the Reaching Every District (RED) approach, the presenter mentioned that RED is not the problem. The problem is how we implement it and how the equity is taken into account. He asked, "How can we bring micro planning in a decentralized approach?" Activities like monitoring should be taken to those concerned. We should capitalize on the experiences of polio. The last point is resource mobilization. One of the reasons RED is not implemented is lack of resources and poor prioritization. He noted that in this region we have outbreaks but we also have opportunities. Take into account governance, reposition communities, Take RED to the communities; translate accountability to the community level etc. He concluded by raising some issues for RITAG.

Addis Declaration on Immunization – Roadmap Development

Helena O'Malley, WHO/AFRO

In February 2016, WHO/AFRO & WHO/EMRO – in conjunction with the African Union and the Government of Ethiopia – hosted the first-ever Ministerial Conference on Immunization in Africa at the AU Headquarters in Addis Ababa, Ethiopia. This conference convened African political leaders as well as African and global partner - around the goal of advancing universal access to immunization in Africa in line with the Global Vaccine Action Plan. Ultimately, the conference was a galvanizing moment for immunization in Africa, bringing together over 1,000 stakeholders which resulted in a first-ever Declaration on Immunization signed by Ministers of Health or Heads of Delegation which includes 10 commitments and 4 calls to action.

Thereafter, WHO/AFRO & WHO/EMRO began working with partners to develop a roadmap outline for Member States to accelerate progress toward improving immunization across the continent by supporting the effective implementation of the Addis Declaration on Immunization (ADI). In September 2016, immunization partners and a number of Member States met at WHO/EMRO (Cairo) to develop roadmap strategies and discuss monitoring and accountability systems. From September to December 2016, in consultation with technical experts and stakeholders, WHO and partners have developed a draft version of the roadmap which will be shared with Member States for their feedback in January 2017. The aim is to finalize the roadmap by early February 2017.

The ADI roadmap's primary target audience is Member States who will lead the roadmap implementation. Universal health coverage will be the mainframe to work from to ensure universal access to immunization as a cornerstone for health and development in Africa. The roadmap will allow all stakeholders to harmonize and coordinate our efforts by supporting

Member States fully achieve the 10 commitments as outlined in the Addis Declaration on Immunization.

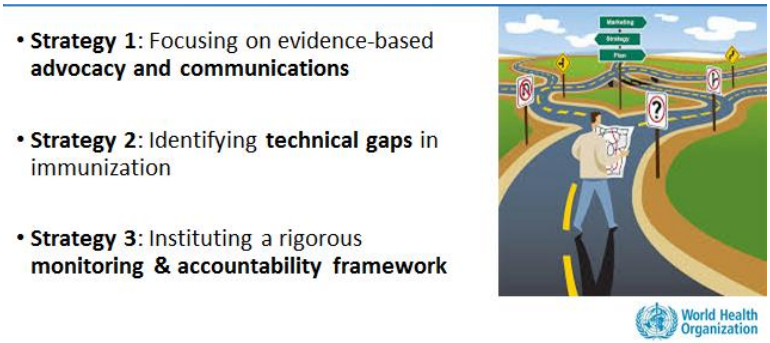

Figure 7: Road map to the ADI

In terms of structure, it focuses on evidence based advocacy and communication as well as identifying technical gap in immunization and instituting a rigorous monitoring and accountability framework. Each of these 3 strategies was developed into approached. For instance the advocacy and communications strategy has 4 approaches etc. She also highlighted the next steps.

Comments and observations

RITAG noted the challenge in repositioning immunization in HSS under the umbrella of service provision. This will need to be specified at the country level. There may be best practices too. They also noted that in the GAVI fund there are HSS funds and wondered if the funds can be integrated.

It was also noted that GVAP and the ADI declaration do not seem to be synchronized. The RITAG noted that there are three plans now, yet reference is not made to the original plan. How does the jigsaw of the different plans work together? The RITAG also raised concern on how the different framework of accountability work together

In terms of coverage, the question was raised on whether the reasons for the missed children are known. The RITAG called for a careful analysis of the profile of the missed children in terms of gender, education, birth order etc. it may be country specific. They also wondered on why there is the stagnation, called for case studies in countries declining or flat or stagnating

RITAG recognized that equity is key to the Sustainable Development Goals (SDG). They demanded that communication tools should look at. They also emphasized the importance of community health worker mobilization. This is linked to community engagement; demand; and hesitancy and refusal. The question that arose at this point is who does community engagement. The health workers are not trained to do this

Following the discussions, RITAG made some recommendation to guide the process of the

ongoing polio transition planning. The RITAG also made recommendation on way of addressing the challenges of achieving high immunization coverage and equity in access to vaccines and immunization services in the Region.

3.3 For Discussion and Decision

3.3.1 Measles/Rubella Elimination Strategies for the WHO African Region

Challenges in Attaining Measles/Rubella Elimination Targets

Dr Balcha Masresha, WHO/AFRO

The African Region adopted a measles elimination goal for 2020 with targets of at least 95% MCV1 coverage at national and district levels. The presentation thus opened with brief update on the performance of the Region on these targets. It showed that the total number of cases has significantly declined over the years. Routine immunization coverage has shown steady increase from 2000 to 2009. However the presenter noted that there has been stagnation between 2009 and 2015.

The criteria is that countries should have had sustained high coverage for two years before they can introduce MCV2. The Region has been conducting SIAs in countries with low coverage because of the small number of countries, which introduced MCV2 coverage has remained low. Twenty four of the 47 countries have MCV2 included in the routine immunization. Despite the fact that the MCV2 countries had high coverage of MCV1 the MCV2 has been generally low.

Some of the challenges faced by countries in increasing MCV2 coverage include:

- Informal rollout of the MCV2 introduction despite the fact that it is for different age group. No systematic sensitization or training of staff conducted to that effect.
- Recording and monitoring tool were not updates.
- Program has not fully implemented vaccination beyond 1st year of age.
- Different antigens used for MCV1 and MCV2 leading to wastage and confusion
- Missed opportunities for MCV because of minimum number of children required to open a vial

There are nine countries that introduced MR into their routine EPI. Eight countries did MR SIAs in 2016. With regards to campaigns and due to availability of fund through Gavi, more and more children are reached in catch up campaigns. There are however some issues with campaign quality and level of local resource mobilization. Only 3 countries that conducted SIAs have all their districts achieving the targeted coverage.

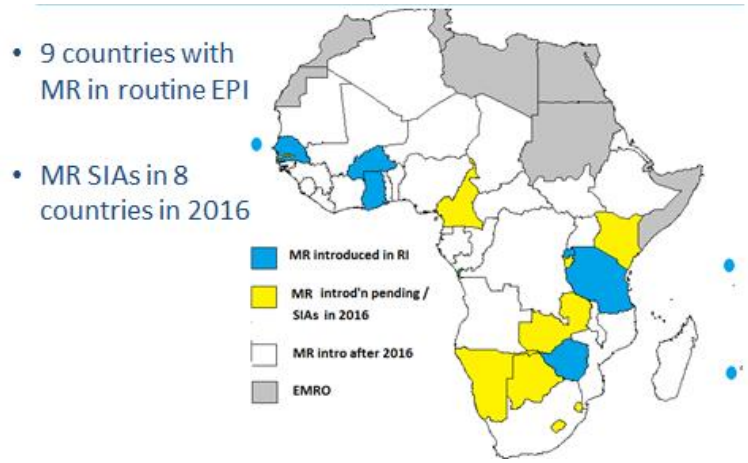

Figure 8: Status of Measles/Rubella Vaccine Introduction

With regards to surveillance, 44 out of the 47 countries have case based surveillance. Seventeen countries met both target while 16 countries meet 1 target while the other countries missed both. Measles surveillance has depended largely on polio resources and if the ramp down is not well managed it may impacted negatively on the achievements.

Table 1: Summary status of measles elimination against the milestones

Indicator : No. (%) of countries with…	RISP milestone for 2015	Regional Status
MCV1 ≥90% nationally and >80% in all districts.	90% nationally in at least 20 countries	• 12 of 47 (26%) countries (WUENIC).
MCV2 in EPI	22 countries	• 24 of 47 (50%) countries
MCV2 >90% nationally		• 3 of 23 (13%) countries (WUENIC).
RCV in EPI	10 countries	• 9 of 47 (19%) countries
>95% SIAs coverage in every district		• 3 of 31 (9.7%) countries (which did SIAs in 2013 – 2015)
Measles incidence < 5 cases per million population.		• 22 of 44 (50%) in the last 52 weeks as of 30 Nov 2016
Measles incidence <1 case per million population.		• 13 of 44 (30%) in the last 52 weeks as of 30 Nov 2016
Targets met for both principal surveillance performance indicators	100%	• 19 of 44 (43%) in the last 52 weeks as of 30 Nov 2016

Table 1 gives the summary achievement on the elimination targets. This revealed gaps and more work to be done. The presenter thus proceeded to enumerate the challenges. These included plateauing of MCV1 coverage, lack of funding, poor quality of SIAs among others. He also discussed opportunities that exist to ameliorate the situation.

Report of the External Evaluation of the Measles Elimination Strategy 2011-2920 in the African Region

Dr Ben Nkowane, Independent Consultant

The chair of the external evaluation team presented the TOR for the mid-term evaluation. He noted that the team came up with 25 recommendations that fall into five groups. He also highlighted the steps and processes that were involved in the exercise as well as the objectives of the measles elimination strategy in the African Region. He presented the guiding principle for the strategy implementation included and the milestones for elimination at the mid-term evaluation. In presenting the results, he noted the wide gaps between targets and the realities on the ground.

Table 2: Measles case based surveillance performance in AFR. 2012 - 2015

Category	*2020 target*	2013	2014	2015
Non-Measles Febrile Rash Illness rate	*≥2 per 100,000 pop'n*	2.9	3.0	2.5
% of districts reporting ≥ 1/100,000 suspected measles cases with blood specimens	*At least 80%*	78%	77%	82%
% of suspected cases with adequate blood specimens	*at least 80%*	78%	85%	82%
Incidence (% countries < 5 per million population)	*100%*	53%	48%	77%
Incidence of confirmed measles per million population	*<1/ per million*	76.9	40	39.4

Table 3 also presented a summary of progress towards the African Regional targets for measles eliminiation.

Table 3: Summary of progress towards the African regional targets for measles elimination at mid-term 2015

Indicator	Regional Status in 2015	Comment
No. (%) of countries with MCV1 ≥90% nationally and >80% in all districts.	12 of 47 (26%) countries with MCV1 of 90% or more according to the WUENIC.	District level coverage data is available only in the country reported admin coverage data, and not all countries have submitted reports on proportion of district coverage.
2. **No. (%) of countries with MCV2 >90% nationally**	3 of 23 (13%) countries with MCV2 of 90% or more according to the WUENIC.	
3. **No (%) of countries with RCV in their routine immunization programme**	9 of 47 (19%) countries	
4. **No. (%) of countries conducting SIAs with >95% in every district.**	3 of 31 (9.7%) countries which did SIAs in 2013 – 2015, and which reported on detailed coverage data have achieved >95% admin. coverage in every district	
5. **No. (proportion) of countries with measles incidence less than five cases per million population.**	23 of 44 (52%) in 2013; 21 of 44 (48%) in 2014; 25 of 44 (57%) in 2015	Three countries (Seychelles, Sao tome & Principe and Mauritius) have not yet established case based surveillance for measles.
9. **No. (%) of MCV SIAs that include additional child health interventions**	26 of 35 (74%) SIAs between 2013 – 2015 have included at least one additional child survival intervention	

Comments and observations

RITAG acknowledged that the assessment is very helpful. It also suggested that there is work to be done in support of this review. What comes out very strongly is weak country ownership and governance. RITAG noted the need to reflect on those that are likely to achieve the target and those that are not. Several suggestions were made here, namely to document the cause of poor performance. RITAG also noted the issues with active surveillance.

The RITAG wondered if this is not right time to consider the establishment of a regional verification commission. Discussions were also held as to when the Region could decide to set a rubella elimination target? It was also resolved that there should be recommendation to the NITAGs

Concern for funding was also raised. Many countries depended on polio. What will happen after the polio funding is gone? To frame this as an argument, RITAG requested for a country analysis. The other thing is to frame the funding discussion as a health system issue as oppose to a single programme issue.

The RITAG also talked about countries planning a transition phase which will outline what is required in the next five years, arguing that donors may relate more with such an approach. It was suggested that such planning should highlight the inadequacies in the stock and also contain information human resources needs. The RITAG members also suggested an adoption of an approach that is integrative and not present SIA in conflict with routine immunization.

The RITAG made recommendations to address the observed uneven progress and challenges for measles elimination with the majority of countries in the region failing to reach 90% coverage for MCV1 and with much lower coverage for MCV2, among others.

3.3.2 Polio Eradication and Endgame Strategy

Global Polio Updates – Including IPV Vaccine Supply and Transition Overview

Dr Michel Zaffran, WHO/HQ

The presentation looked at the impact of GPEI on the progress of WPV eradication between 1988 and now. Dr Zaffran noted that this year recorded only 34 cases against 76 cases this time last year, the lowest number of reported cases ever globally.

Pakistan and Afghanistan recorded the lowest cases ever. Overall situation has improved in Pakistan and Afghanistan. However, some concerns were noted with cross border issues for instance.

With regards to the transmission in 2016 he noted that results from both environmental sampling and AFP in Pakistan still show active transmission. No positive environmental samples from Afghanistan were reported in 2016. Five separate VDPV type 2 events from Pakistan: Quetta (4, pending mOPV2 response), Hyderabad (fIPV response), Lahore (iVDPV).

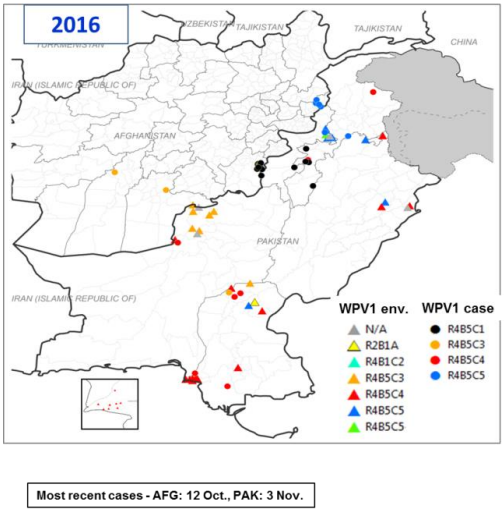

Figure 9: AFG-PAK epidemiological block: WPV1 by genetic cluster, 2016

However, genetic sequencing of virus clusters in 2016 revealed diminishing number of chains of transmission, implying decreasing number of active virus clusters from 8 in 2015 to 7 in 2016. He concluded that the situation has improved as we now have decreased cases & positive environmental samples. He noted that strong Emergency Operation Centers (EOCs); strong coordination between the two national programs and National Emergency Action Plans (2016-2017) have been operationalized and kicked off. The outstanding concerns are deteriorating access in north-east Afghanistan (Kunduz); outbreak in south KP / FATA – southeast Afg. Block and weaknesses in surveillance at district level in Pakistan.

With respect to the Nigeria and Lake Chad region he noted the outbreak of viruses in Nigeria. These included four WPV1 cases reported in Borno in the last three months – all 'orphan viruses'; 2 cVDPV2 isolated – also 'orphan viruses'. These represent hundreds of infections, and years of missed transmission. All cases related to areas where the polio program stopped immunizing 2+ years ago because of inaccessibility due to Boko Haram threat. Regional public health emergency and Coordination centre was established in N'djamena, Chad with representatives of the 5 countries around the Lake Chad Basin. Five rounds of Multi-country outbreak response targeting over 40 million children were implemented.

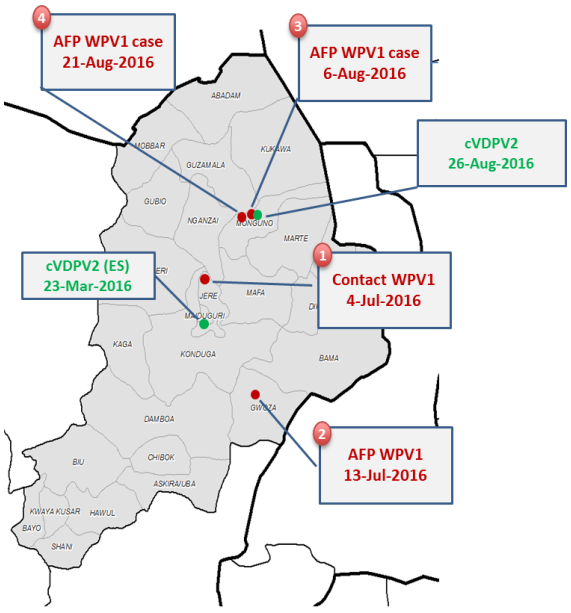

Figure 10: WPV outbreak in Borno State, Nigeria

The presentation also highlighted the important lessons learnt from Nigeria. Some of the lessons highlighted include need to look 'beyond indicators'; and look at cohort of susceptible children in specific groups (IDPs, Refugees, 'locked in' groups, etc…). Others include additional surveillance initiatives including mapping inaccessible settlements, expansion of environmental surveillance, geocoding of AFP cases and community involvement; and additional SIAs initiatives with hard to reach strategies and Permanent Transit Point Vaccinations.

The presentation also looked at implementation status of the other three objectives of the polio eradication and endgame strategic plan. In specific terms, he mentioned that the globally coordinated switch was a success and all 155 countries/territories using tOPV switched to bOPV in a synchronized manner. However, he flagged the need to stay vigilant for WPV2, having recorded 23 VDPV2 events since the switch. Unfortunately, IPV supply continues to decline due to production issues with both suppliers. This has impacted Tier 1 and 2 countries. He also noted the fact that SAGE is aware of this challenge and has made recommendations to guide operations.

With respect to containment, he noted that 24 countries have reported hosting 58 designated poliovirus essential facilities (PEFs). And with regards to polio transition, he enumerated the process of development of strategies for sustaining the polio free world. This strategic plan defines the future state (technical and programmatic) for a polio-free world. The TMG will coordinate the implementation of the Post-certification Strategy. He ended the presentation with a highlight of the current priorities for the GPEI.

Polio Update in Africa – focusing on the lake Chad Basin Region and other risks

Dr Pascal Mkanda, WHO/AFRO

Dr Pascal noted that the update is looked at in three ways. These include wild poliovirus type 1; circulating vaccine derived poliovirus and emerging VDPVs after the global switch. He then proceeded to present the emergency response to the poliovirus outbreak in Nigeria. He then enumerated the various steps taken in response to these outbreaks to include:

- Establishment of the Lake Chad Polio Task Team in August 2016 to coordinate outbreak response
- Ministerial Declaration of the wild polio outbreak in Nigeria as public health emergency in August 2016
- 5 synchronized polio outbreak rounds have been conducted
- Review of the outbreak responses in October - November 2016 to ensure interruption by end of Dec. 2016
- AFRO mechanism for monitoring recommendations implementation in place
- Reaching children for polio campaign and surveillance in inaccessible areas of \Lake Chad Basin

He also discussed other initiatives including strengthening surveillance in areas with gaps (inaccessible and accessible areas). He touched on AFP surveillance performance challenges in the Region in the last 12 months. According to him, some of the remaining surveillance challenges are in localized areas with insecurity hindering reach for surveillance activities; competing outbreaks and reliance on polio staff for response; weak health systems and logistic challenges for transportation of specimen; not prioritizing polio after being polio-free for many years; incorrect geographical location of AFP cases skewing actual performance. He then listed initiatives to strengthen surveillance in areas with gaps irrespective of their accessibility.

On objective 2 of the polio eradication and endgame strategic plan, he discussed issues relating to global IPV shortage; intradermal fractional IPV (fIPV) use in campaign and routine immunization settings. Other issues he touched on included responding to de-novo VDPV2 versus the risk of using a live vaccine (mOPV2) with a threat of new VDPVs emergence. He also noted the need for continues vigilance for Sabin type 2 isolation and response.

On Objective 3 he noted the challenges of Phase 1b laboratory containment in 2016. According to him, while phase 1a was completed in all 47 countries with South Africa as a polioviruses essential facility (PEF), the National Authority for Containment (NAC) has not yet been established and trained. He flagged the need for timely finalization of the inventory and survey of bio-medical labs for Phase Ib containment and also stressed the reluctance by bio-medical research institutes and surveillance networks (rotavirus, influenza) to destroy samples, he called for intensification of discussions and advocacy with research institutes

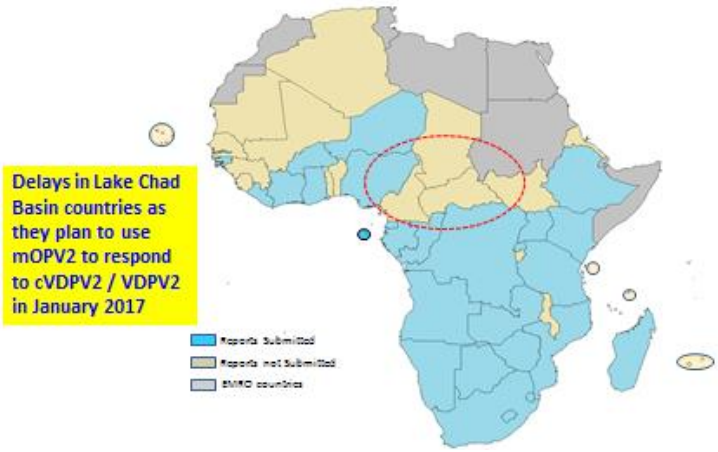

Figure 12: Status of Phase 1b Laboratory containment in African Region by 10 Dec 2016

GPEI Ramp-Down and Transition Planning in the African Region – UNICEF & WHO Perspective

Ms Helena O'Malley, WHO/AFRO

The presenter provided highlights of the progress to date. She enumerated the seven indicators of the transition planning process, and against these indicators she presented the performance levels of different countries. For instance communication to government leadership and appointment of governing management team are accomplished in all the countries. Similarly most countries have mapped the available polio assets. Few countries have mapped countries priorities while many others are still in the process. Majority of the countries are yet to start working on the last three indicators.

On polio ramp down, she made comparisons between the 2014/2015 funds distributed to WHO/AFRO including polio and Ebola activities, and 2014/2015 funds distributed to AFRO less polio and Ebola funds. It showed that 44% of the overall budget was for polio. On the average 22% of polio funds go to core staff while 13% and 65% are for surveillance and SIAs respectively. She also showed a graph of polio funded core staff and their locations.

Furthermore, she presented an analysis of the estimated time allocation of polio personnel by country. The countries included those with heavy GPEI investment, namely Afghanistan, Angola, Chad, DRC, Ethiopia and India. Others included Nigeria, Pakistan, Somalia and South Sudan. On the average therefore, she noted that staff spent 40% of their time on routine immunization related activities.

She gave the country ramp-down statistics in 4 waves. Wave 1 (2017): 117 "core staff" termination letters dispatched by end-2016 (Lake Chad Basin countries exempt); Wave 2 (2018): Termination letters dispatched by end-March 2017; Wave 3 (2019): Termination letters dispatched by end-March 2018; and Wave 4 (2020 & beyond): What are core polio functions that remain in post-eradication era? Elaborating on Wave 1, she noted that there will be 117 "core staff" termination letters dispatched by end-2016. Key brunt of terminations will include: Angola, DR CONGO & Ethiopia (80 staff functions). Remainder 37 functions are in: B. Faso, Congo, Cote d'Ivoire, Eritrea, Kenya, Liberia, Madagascar, Mali, Mozambique, Rwanda, South Africa, South Sudan, Tanzania, Togo, Uganda, Zambia. It is important to note that the transition process is currently on hold in Nigeria and Cameroon due to the ongoing outbreak response in Nigeria & the Lake Chad region, and Nigeria's reclassification as an endemic country

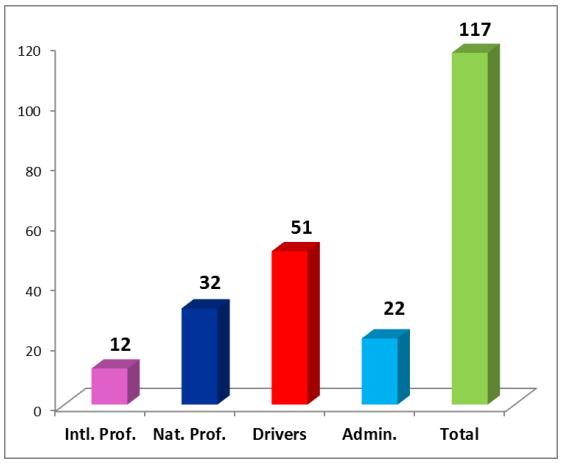

Figure 14: WHO/AFR Ramp-Down – Wave 1

Comments and Observations

The RITAG noted that the situation in the Lake CHAD region is very dangerous and stressed that all the people working there deserve support, good will and prayers from immunization partnership including the RITAG members. The health worker operating in those locations should be recognized as heroes without doubt. It was stressed that inside Lake Chad there are over 1000 islands with many children and only accessible from Chad. From the Nigeria side, there are hundreds of such inaccessible islands. The populations are very mobile and scattered all over Nigeria. Activities are not synchronized with the Nigeria government. There is a need to have a policy to get the countries synchronized. RITAG also noted the lack of synchronization in community engagement and management of the refugee situation across countries in the Lake Chad Region. The RITAG called for caution about other areas like the CAR, South Sudan and concluded that the job is not yet done. The RITAG also discussed the threat of other outbreaks in places like Nigeria and transmission to Ethiopia and Somalia. They equally discussed the outbreak in Madagascar and noted that the response was precipitous

With regards to polio transition planning, it was noted that the risk of more outbreak should be carefully assessed to guide the transition planning and ramp down. They wondered if the transition plans considered new risks with inaccessible and migrating population as well as nomads. It was noted that whereas countries have been informed of the transition, the messages do not seem to be going across. They wondered if the transition is premature given the risks and the existence of IDP, inaccessibility of the population without detailed country planning. They called for rationales for longer period. It was noted that 50% of the staff time is spent on other

activities. It was then suggested that new donors should be engaged. To sustain more support it was argued that the problem should be broadened. Partners present at the meeting agreed that there is a disconnection in the planning and budgeting. They expressed appreciation for the transition in IMB but were worried with the quality of outbreak response. They called for independent assessment of outbreak response verification of the children access to the vaccines in line with the guidelines. Members also noted the importance of security and security compromised areas, mentioning Nigeria as a typical example. They called for more emphasis on cross border and transit teams.

Finally, the RITAG called for independent review of the impact of transition on immunization programmes. In addition to an independent evaluation of WHO, there should be an evaluation of what is required for lagging countries.

On IPV fractional dosing and off label use, the RITAG noted serious constraints on supply. It also noted SAGE recommendation. They also noted the challenge to dosing twice but may have to use fractional dosing if supply worsens. They noted the need to sensitize the NRA.

Finally, RITAG made recommendations addressing issues affecting inaccessible areas as well as importation of polioviruses from countries with continued transmission. The recommendations also touched on support for countries to increase vaccination.

3.3.3 Eliminating Yellow Fever Epidemics in Africa

Global Strategy for Eliminating Yellow Fever Epidemics

Dr Richard Luce, WHO/HQ

The presenter noted that the new global strategy for eliminating YF epidemics builds on lessons learned from previous control efforts in an integrated manner. This is a 10 year global strategy 2017-26 for 34 and 13 countries at risk in Africa and the Americas respectively. The new strategy, which is ready for adoption by the WHA in 2017, is comprehensive and comprising of both risk evaluation and preventive vaccination strategies.

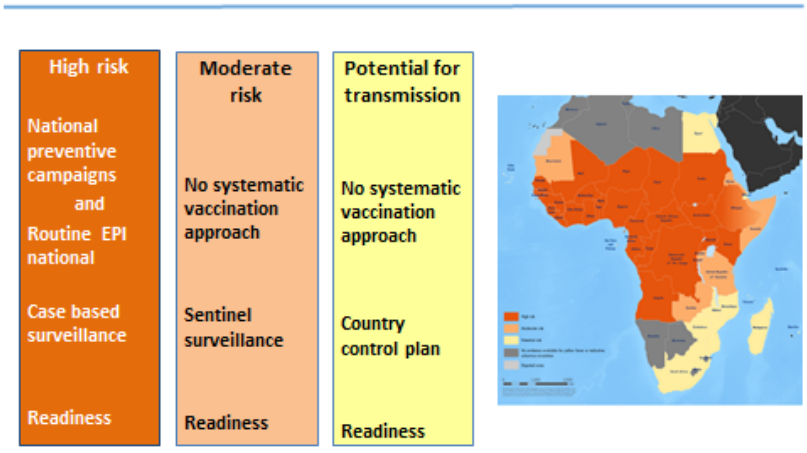

Figure 15: Three categories of risk

He stressed that strategic objective 2, which focuses on preventing international spread seems to be a straight forward mechanism but the international checking of vaccination status is proving a challenge. On the third strategic objective to contain outbreaks rapidly, he presented the situation

with surveillance and lab capacity. The strategies include building capacity for surveillance and laboratory; increase diagnostics capacity and improve on regional database management. In summary, it is clear that early YF control efforts were effective and EYE is updated for long term and comprehensive strategy. It has been largely risk based rather than endemic zone approach. Vaccination has been through a combination of routine and campaign. YF stockpile is maintained for response and vaccine manufacturers

He presented the next steps for the African Region. These include to:

- Adapt the global YF strategy to regional level
    - Validate and disseminated to countries
- Develop a regional implementation framework for the global strategy
- Present the framework to the next RC meeting for adoption and endorsement

Challenges in Eliminating Yellow Fever Epidemics in Africa

Dr Mamoudou Djingarey, WHO/AFRO

The yellow fever vaccine is efficacious and one shot protects for life. Ironically it is not used in all at-risk countries. Dr Djingarey, the presenter, noted that the suppliers are already able to supply more than they had in the past and have potential for reaching future requirements. This year 2016 supply to UNICEF exceeded 50 million doses. If suppliers are able to utilize their new installed capacity, then there is hope to reach the forecasted target doses.

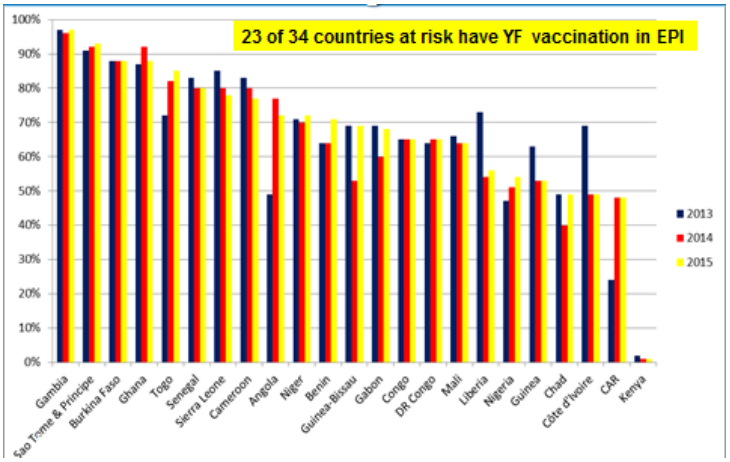

Figure 16: YF-WHO/UNICEF estimated national immunization coverage in AFR 2013-2015

Unfortunately there is inadequate funding for operational activities. He gave detail of other challenges that exist. These include increasing urbanization in endemic areas, low population immunity and high densities of the *Aedes aegypti* mosquito vector (increased likelihood of large urban outbreaks, resurgence of vectors); inadequate funds for field operational activities; risk assessment pending in countries considered as high risk; and limited stocks of the YF vaccines globally. Others include achieving the YF vaccine coverage target (90%) per the AFR regional strategic plan for immunization (2014-2020); organizing preventive mass campaigns; introducing YF vaccination in remaining EPI programs that do not provide it; delay in lab confirmation and surveillance gaps; and how to decrease the delays of 3-4 months between onset/detection and conducting response campaigns.

Comments and observations

The availability of the vaccine was discussed exhaustively. Members wanted to know the basis for the estimation. Responding to this concern it was mentioned that it was based on risk assessment. However, it did not take into consideration what is happening in China. All the same, this is a disease that can be easily managed. In summary, this is the need based on the current production.

The RITAG noted the EYE strategy as presented as well as the SAGE recommendation on fractional dose. The RITAG also reviewed the availability of the vaccine and took note that the EYE strategy has taken into account that dimension. The RITAG recognized the dearth of suppliers and encouraged dialogue with the manufacturers. As the Regional office move from the EYE strategy to developing regional framework for implementation of the EYE strategy, RITAG requested that the document be shared with the RITAG members for comment before completion

The RITAG recognizes that while it is not possible to eradicate yellow fever, elimination of epidemics is feasible and is essential against the backdrop of global warming, the changing distribution of *Aedes aegypti*, migration and urbanization. It thus made recommendations to address the challenges and facilitate the realization of the programme goals.

3.3.4 Maternal and Neonatal Tetanus Elimination in Africa

Progress towards MNT Elimination in Africa

Dr Balcha Masresha, WHO/AFRO

Presenter started by flagging the point that the MNT elimination targets have been missed many times since 1995, 2005, 2010 and 2015. He presented the key strategies to MNT elimination as highlighted in the GVAP (all countries to eliminate MNT by 2015) as well as in the Regional Immunization Strategic Plan (RISP) 2014-2020. He also reviewed the various elimination strategies and proceeded to elaborate on objective 4 of RISP which holds that "all countries to attain and validate elimination of maternal and neonatal tetanus by 2020" with clear milestones.

There is another recommendation that called on countries to shift from TT to TD. As of today only 14 of the countries have done this. Even among the 14 most of the countries are using both TT and TD simultaneously.

He listed some of the principal challenges to include low visibility of MNT, more visible

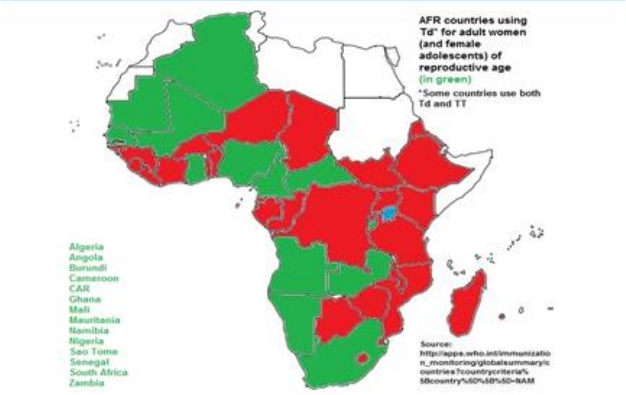

Figure 17: AFR countries using Td for WCBA, 2015

competing priorities; disease burden information not widely available, weak surveillance; lack of leadership/ champions; inadequate and unpredictable partner funding; rumours and cultural sensitivities, traditional harmful practices around delivery. Others were gaps in ANC, safe delivery services; and civil unrest/ conflict limiting access.

Comments and observations

RITAG members called for a careful review of the investment case to assess provision for the MNT elimination. There was concern with the reason for going back to the old schedule and the RITAG noted that this needs to be made clear to the countries. This issue of MNT programme being an orphan of the EPI but not well rooted in the Family Reproductive Health (FRH) programme is also a challenge. It was stressed that looking at countries that have attained elimination status and looking at long term sustainable approach we have to incorporate school based programming. This gives opportunity to reach the target population for the booster doses. This can be integrated with other school age interventions like deworming.

The group wondered if there is an algorithm to help the Traditional Birth Attendants (TBAs) to guide mothers on what services they should receive and whether it is possible to come up with some strategies that combine essential strategies for pregnant women.

Surveillance issues were also considered important. It was noted that disease and case based surveillance have been done, but the threat to surveillance with polio transition is very palpable. The other very strong message here is the integration with other child health services. RITAG noted the need to strengthen the recommendation for integrated services. Vertical donor funded programmes will weaken integration.

In terms of framing this, the other thing that came out is the MNT risk assessment and equity assessment. This will bring it in the context of the SDG. RITAG noted the serious challenge in this region including Nigeria. Uniject TT might be a useful technology for the hard to reach area else the emphasis should be on TD.

Finally the RITAG made recommendations to fast-track the development of the MNTE investment case as well as address other issues confronting the Region on its progress to attaining the MNTE goals.