World Health Organization
Regional Office for the Eastern Mediterranean

Regional Committee for the Eastern Mediterranean
Sixty-first session
Provisional agenda item 3(b)

EM/RC61/INF.DOC.1 Rev.1
September 2014

Progress report on eradication of poliomyelitis

Introduction

1. In response to the Middle East and Horn of Africa outbreaks, and the ongoing endemic transmission of polio in Pakistan and Afghanistan, the Regional Committee for the Eastern Mediterranean in October 2013 adopted a resolution (EM/RC60/R.3) on intensifying polio eradication efforts in the Region. The Regional Committee declared the spread of wild poliovirus an emergency for all Member States of the Region and reemphasized the importance of stopping ongoing endemic poliomyelitis in Pakistan and Afghanistan.

2. In May 2014, WHO declared the international spread of polio a global public health emergency of international concern. This declaration under the International Health Regulations (IHR) has implications for all countries in the Region, but particularly for Pakistan and the Syrian Arab Republic, which are required to ensure the immunization of all international travellers, and for Afghanistan, Iraq and Somalia, which are recommended to do so.

3. The first meeting of the global Islamic Advisory Group (IAG) was held in February 2014 in Jeddah. The objective of the IAG is to provide leadership and guidance for building ownership, solidarity and support for polio eradication across the Muslim *ummah.* The outcomes of the meeting were a six-month action plan for IAG support to polio eradication activities in areas of conflict and where bans on vaccination are in place, and the Jeddah Declaration, which strongly condemns the killing and intimidation of health workers.

Current situation in the Region

Overview

4. The Eastern Mediterranean Region is currently the most polio-affected Region in the world, with two of the three remaining endemic countries, and with two outbreaks (in the Horn of Africa and the Middle East) posing serious threats to the regional and global eradication efforts. The completion of wild poliovirus eradication continues to be hampered by the difficulty in ensuring safe access to children in conflict areas, an inconsistent rate of improvement in the quality and coverage of supplementary immunization activities, as well as by weak routine immunization programmes. The Region has been successful in maintaining the polio-free status of 17 countries, with significant progress in Afghanistan, one of the polio endemic countries. There has been no poliovirus type 3 circulation reported for more than two years, from either acute flaccid paralysis (AFP) or environmental surveillance.

5. Access to children for vaccination in the security-compromised areas in south and north Waziristan agencies of the Federally Administered Tribal Area (FATA) in Pakistan, in the south–central zone of Somalia and in areas of the eastern region in Afghanistan is an unresolved challenge. Additionally there are challenges accessing children in conflict-affected areas of the Syrian Arab Republic and Iraq. There is a strong need for concerted and coordinated efforts to solve these very specific political, social and security challenges in all these countries.

Polio endemic countries

6. Significant progress has been made in Afghanistan. Only one case was reported from the endemic area of the southern region in 2013 and so far two were reported in 2014. However, six cases have been reported in 2014 from the eastern and southeastern regions, where insecurity is impeding safe access for all children for vaccination. Genetic sequencing demonstrates that the poliovirus detected in 2014 is closely related to virus circulating in Pakistan.

7. The programme in Afghanistan is continuously innovating in response to challenges; negotiation for access, short interval additional doses (SIADs), permanent polio vaccination teams, vaccination at transit points and also now plans to introduce inactivated polio vaccine (IPV) in difficult access areas are all strategies that have been adopted. Initiation of environmental surveillance in high risk areas of Afghanistan is providing critical evidence to supplement AFP surveillance.

8. There remain significant risks in Afghanistan. Continuing issues of access in the eastern region, and also in the southern region, pose the greatest risk to eradication. Movement of populations within the country and across the border with Pakistan is also a critical factor in virus circulation and these mobile populations must be reached and vaccinated through appropriate strategies.

9. In Pakistan, despite the geographic narrowing of polio transmission to parts of FATA and neighbouring areas of Khyber Pakhtunkhwa, Peshawar and Karachi, the situation remains serious. Pakistan alone is responsible for nearly 80% of all polio cases reported globally. This is primarily due to lack of access to children for vaccination largely owing to a continuing ban on immunization by militants in North and South Waziristan, and insecurity and the killing of polio workers in the field.

10. In other areas, progress has been made. The Government of Pakistan has taken rapid and appropriate steps to address IHR recommendations on reducing the risk of international spread. The sustained eradication efforts over the past years have limited poliovirus circulation to small areas, and the vast majority of the people of Pakistan live in communities that are polio-free. In 2013, episodes of the spread of virus from infected areas to polio-free areas were managed efficiently and effectively and transmission was not re-established in any polio-free area. The programme has continuously introduced innovations to address challenges, including one-day vaccination campaigns, SIADs, vaccination at transit points around inaccessible areas and the planned introduction of IPV in selected settings.

11. However, Pakistan remains the greatest single risk for the achievement of global polio eradication. Issues of access to immunization for children, and safety of vaccinators, must be solved to ensure that the programme can be completed.

12. In both countries, the role of communication and social mobilization is becoming even more pronounced, and the need to raise community awareness and build demand is more significant than ever. Political commitment remains high in both countries. Management and accountability frameworks have been introduced as part of the annual national emergency action plans in both Afghanistan and Pakistan.

Polio outbreak countries

13. In line with resolution EM/RC60/R.3, comprehensive strategic plans were developed in coordination with national governments and partners in response to the outbreaks that commenced in 2013 in Somalia and the Syrian Arab Republic. Since the beginning of the outbreak in the Horn of Africa, Somalia has reported 194 polio cases in 2013 and five cases in 2014. Meanwhile, the Syrian Arab Republic has reported 36 polio cases, with the onset of the most recent case being 21 January 2014. In 2014 the outbreak spread to Iraq, which has reported two cases, in February and April. Both

multi-country outbreak responses are being regularly reviewed and Phase 2 and 3 response plans developed, based on the evolving epidemiology and lessons learnt.

14. In Somalia and the Syrian Arab Republic a number of strategies were deployed to raise population immunity immediately in order to control the outbreaks, including use of effective tools (bivalent oral poliovirus vaccine), new strategies (SIAD, permanent transit vaccination posts and low profile vaccination teams), timely support through the appointment of additional staff, prepositioning of vaccine and expanding the age group for vaccination. A strong working relationship among all partners was important in addressing the emerging issues and evolving epidemiological developments. Coordination between the WHO regional offices for Africa and the Eastern Mediterranean also had a positive impact in controlling the Horn of Africa outbreak. For both outbreaks, preventive vaccination campaigns were conducted in countries at particular risk, including Djibouti, Egypt, Iraq, Jordan, Lebanon, Palestine, Sudan and Yemen, with special focus on migrants and internally displaced persons.

Implementation of polio eradication strategies

Routine immunization

15. Improving routine immunization (EPI) services and coverage continues to be a cornerstone strategy for polio eradication. Despite significant investments, routine immunization coverage remains sub-optimal in several high risk countries of the Region, both at national and subnational levels. In the 2013–2018 Endgame Strategic and Legacy Plan of the Global Polio Eradication Initiative, there is a major focus on the optimal use of polio programme assets to improve and sustain immunization service delivery. At least 25% of polio field staff time is contributed to immunization system strengthening. This includes surveillance support for vaccine-preventable diseases (including measles and maternal and neonatal tetanus), implementing the “reach every district” approach (e.g. district micro-planning) and assessing cold chain facilities. The vaccination status of AFP cases is used to identify areas of sub-optimal performance of routine immunization programmes. As well, during supplementary immunization activities, vaccination staff record zero routine dose children.

16. Polio eradication and routine immunization teams are coordinating closely on plans for the improvement of routine immunization in key high risk countries, the introduction of at least one dose of IPV in 2015 and preparations for switching from trivalent oral polio vaccine (OPV) to bivalent OPV in 2016.

Supplemental immunization activities

17. Supplementary immunization activities continue to play an important role in the Region to ensure that all children less than 5 years of age are vaccinated against polio. In addition to the endemic and polio-affected countries, polio-free countries with a high risk of importation (Djibouti, Egypt, Islamic Republic of Iran, Jordan, Lebanon, Libya, Palestine, Saudi Arabia, Sudan, Yemen) conducted supplementary immunization activities in 2013–2014 nationally or in areas with high-risk populations and low routine immunization coverage in an effort to boost and maintain population immunity of high-risk groups. Other vaccination opportunities, such as measles campaigns, are used to deliver additional doses of OPV to help boost population immunity.

18. Iraq, Somalia and the Syrian Arab Republic are conducting intensive vaccination campaigns until all poliovirus transmission is stopped.

19. Afghanistan and Pakistan continue to implement an intensive supplementary immunization activity schedule and mop-up activities are implemented in response to isolation of wild poliovirus in newly infected areas. The SIAD strategy is proving useful, particularly in the security-compromised areas. Both countries have taken maximum advantage of bivalent OPV.

20. Finger marking of vaccinated children has been used to help ensure that no child is missed. Post campaign monitoring is conducted to assess the outcome of campaigns, and the findings help to pinpoint problems so that improvements can be made. All countries report campaign data to the WHO Regional Office and headquarters to allow analysis of programme performance. In Afghanistan, Iraq and Pakistan, some high-risk districts are also conducting lot quality assurance sampling as a method to further assess campaign quality.

Surveillance for acute flaccid paralysis

21. In the context of poliovirus importations from Pakistan, the current outbreaks and high population movement in general, all countries in the Region are at risk of importation. It is therefore vital that AFP surveillance in all countries should be at high alert and sensitive enough to detect any importation immediately.

22. Key AFP surveillance indicators (i.e. non-polio AFP rate and percentage of adequate specimens) at the national level are reaching international standards in most countries of the Region. While nearly all countries are meeting the baseline detection rate for AFP cases per 100 000 children under the age of 15 years, there are a number of countries barely reaching this rate and where sensitivity remains marginal. In addition, subnational data analysis has highlighted gaps in indicators even in countries meeting baseline indicators, which are more significant for countries that have been polio-free for many years. This includes several countries that are at significant risk of importation of wild poliovirus either from endemic areas or from the current outbreaks.

23. All countries provide AFP surveillance data to the regional office weekly. The data are analysed and published in the Polio Fax report that is distributed weekly to countries, partners and donors and is posted on the website. The weekly Polio Fax provides a means for ongoing monitoring and evaluation of performance indicators with timely feedback to ministries of health, partners and donor organizations.

24. Environmental surveillance is now being conducted in Afghanistan, Egypt and Pakistan as a supplement to AFP surveillance, and in the right circumstances has proved to be very useful tool. Potential expansion to other countries is under discussion, and will be carried out based on thorough assessments of utility.

Regional laboratory network

25. All regional poliovirus network laboratories are fully accredited and have passed the proficiency testing panels for virus isolation and intratypic differentiation (ITD). The workload of the network laboratories is very high. In 2013, network laboratories processed nearly 27 113 specimens from AFP cases (77%), contacts (20%), healthy children (0.5%), environmental samples (1.9%) and others (0.6%). Laboratory performance has been maintained at certification standard. The average time between the receipt of samples in the laboratory and reporting the result was 12 days in 2013. Overall, 92% of specimens had culture results within 14 days, 98% had ITD results within 7 days of virus culture positive referral and 96% of final laboratory testing results were provided within 45 days of paralysis onset. The real-time PCR (rRT-PCR) method for rapid characterization of polioviruses was implemented and is performed in 7 of 12 poliovirus network laboratories.

26. The iVDPV surveillance project supported by VACSERA in Egypt and sero-conversion study in Karachi supported by Pakistan regional reference laboratory is continuing. The iVDPV surveillance project in Egypt has detected 4 cases to date since 2011.

Improving the quality of life of polio victims

27. The regional polio eradication programme continued providing polio-affected children with the treatment needed for physical as well as social rehabilitation. These services include physiotherapy, provision of orthotics and corrective devices and facilitating schooling, thus helping the polio survivors to become independent and productive members of the community.

Technical and financial support to countries

28. Technical support has been maintained through the deployment of international staff supported by consultants, short-term officers (STOP team) seconded from the U.S. Centers for Disease Control and Prevention, and national professional officers, supported by other national staff. In addition, teams of experts constituting both regional and country technical advisory groups extend technical support to the national programmes on strategic direction. All polio staff extend support to other priority and emergency health programmes at country level.

29. Most Member States have continued to provide much of the required resources for the eradication effort, particularly for routine immunization and surveillance. In addition, considerable external financial resources were secured to support national activities, especially for the provision of operational expenses and technical support, and for the continuation of surveillance activities.

Coordination with other WHO regions

30. Coordination with other WHO regions, especially the African, South-East Asia, Western Pacific and European regions, is continuing. Efforts are made to synchronize dates of supplementary immunization activities where relevant. In March 2014, a consultation was held between the African and Eastern Mediterranean regions on the experience of working in inaccessible areas and areas suffering from conflict.

31. The Horn of Africa Technical Advisory Group is an excellent example of close coordination between countries of the African and Eastern Mediterranean regions. Cross-border coordination meetings are encouraged at the country level. The regions coordinated and responded jointly to the Horn of Africa outbreak. A joint coordinator for the Horn of Africa outbreak response has been appointed, supported by both regions. The Kenya Medical Research Institute (KEMRI) laboratory is supporting Somalia and South Sudan and the laboratory of Sudan is supporting Eritrea. The Eastern Mediterranean Regional Office supported Nigeria in the development of environmental monitoring.

32. The regular participation of representatives of other regions in regional meetings, such as the Regional Technical Advisory Group and Regional Certification Commission, ensures exchange of information on lessons learnt and useful practices.

Challenges and future directions

33. Polio eradication is a critical challenge for the Eastern Mediterranean Region. The objective in 2014 is to interrupt transmission in Pakistan and Afghanistan, control the Horn of Africa and Middle East outbreaks and maintain the status of polio-free countries.

34. For Pakistan, it is essential that all children have access to vaccination. The range of activities designed to ensure this that are discussed above, from negotiation to special strategies to reach all children, must be fully implemented if the goal of eradication is to be achieved. In Afghanistan, now is the time to consolidate the gains in the southern region and to replicate the lessons learnt there in the eastern region. In both countries there is strong need for regular performance reviews and assessments, linked with the accountability framework of the national emergency action plans, the engagement of provincial and district governments and continuous oversight by Heads of State and Heads of Government.

35. Outbreaks in Somalia and the Syrian Arab Republic are being reviewed at quarterly intervals and the impact of the response activities assessed. Corrective measures are taken based on the findings and to address the evolving epidemiology. For the outbreak countries, it is critical to maintain strong working relationships between the government and all partners to address the emerging issues and evolving situations through joint efforts.

36. In the polio-free countries of the Region, the priority is to maintain high population immunity, certification-standard AFP surveillance and the capability to respond rapidly to any importation. As urged by the Regional Committee in resolution EM/RC60/R.3, the engagement and political support of all countries is essential. The regional team will continue conducting risk assessments and sharing the results with Member States, and will support the development of appropriate plans and actions to respond to identified risks.