Joint Meeting of the Technical Advisory Groups on Polio Eradication in Afghanistan and in Pakistan

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Islamabad, April 17-18, 2007

Conclusions and Recommendations

1 Preamble

A joint meeting of the Technical Advisory Groups (TAG) on Polio Eradication in Afghanistan and in Pakistan was held in Islamabad, Pakistan, from 17 to 18 April 2007. This meeting follows the previous meeting of the TAGs in 2004, and several informal consultations, the latest of which was held in December 2006.

The TAG members proposed the holding of a joint meeting since Afghanistan and Pakistan now truly form a single epidemiological block for wild poliovirus transmission, and while many of the circumstances facing each country are different, coordinated efforts are essential to stop the final chains of transmission. The objectives of the TAG were to review progress towards interrupting wild poliovirus transmission in both countries, to discuss planned activities, and to make recommendations to improve technical and managerial aspects of the programme in each country. Data were presented to the TAG by teams from both national and provincial authorities, UNICEF, and WHO. The TAG noted the major efforts made by the government and partners to implement the recommendations of the previous TAG meetings and informal consultations.

The TAG framed their findings, conclusions, and recommendations in the context that the remaining period of 2007 presents an exceptional and unprecedented opportunity to interrupt wild poliovirus transmission in the last remaining transmission zones of Afghanistan and Pakistan.

2 Current epidemiological situation

Afghanistan

- A total of 31 cases due to WPV were reported in 2006, 29 WPV1 and 2 WPV3. The vast majority (27 of the 31 cases) were the result of outbreaks of WPV type 1 in Southern Region, (originally due to wild poliovirus previously circulating in Pakistan), which spread into neighbouring Western Region, and back into Baluchistan in Pakistan. This outbreak peaked in May and June 2006, with the last cases of WPV1 in Southern Region having onset in September. The remaining two cases of WPV1 were reported from Eastern Region and Central Region. These cases were not directly genetically linked to each other, but were of the same genetic cluster and both were linked to viruses previously and currently circulating in border areas of both Afghanistan and Pakistan.

- In 2006 two cases due to WPV type 3 were also reported in Southern Region, one genetically related to prior circulation in Afghanistan and the other to viruses circulating in Pakistan.
- As at 17 April, no WPV cases had yet been detected in 2007. However, viruses detected in Pakistan in 2007 have genetic links to 2006 viruses from Southern Region and Eastern Region Afghanistan.

Pakistan

- A total of 40 cases were confirmed in Pakistan in 2006, 20 due to WPV 1 and 20 due to WPV 3. Transmission has been generally restricted to discrete transmission zones. The bulk of WPV1 cases have occurred in outbreaks in southern NWFP and in tribal areas, in Baluchistan in shared outbreaks with Southern Region Afghanistan, and in Karachi in Sindh. Most WPV3 cases have occurred in northern Sindh and along the transmission axis into Baluchistan, with some cases in tribal areas in central NWFP. Punjab reported only 2 cases in 2006, one WPV1 and one WPV3, the latest in July.
- In 2007 to date 7 cases have been confirmed, 5 WPV3 and 2 WPV1. Four of the WPV3 cases have been reported from the northern Sindh/neighbouring Baluchistan transmission zone. The other WPV3 was reported in Nowshera District, NWFP, closely genetically related to cases in NWFP in 2006. One WPV1 case has been reported from Karachi, and one from Khyber in NWFP.
- No WPV1 has been reported from reservoir areas in northern Sindh since 2005, and southern Punjab since July 2006, demonstrating the impact of mOPV1 in these areas.

3 Challenges and risks

The TAG identified the following challenges and risks to interrupting wild poliovirus transmission in Afghanistan and Pakistan.

- **Persistence of WPV transmission in known high risk areas:** Some areas of both countries have consistently maintained wild poliovirus transmission, or have been consistently at risk of persistence of transmission following re-introduction, for the past 3 years. The TAG considers the following areas and populations in Afghanistan and Pakistan at greatest risk of ongoing transmission of wild poliovirus in 2007:
  - Southern Region of Afghanistan and the Quetta/Killa Abdullah/Pishin area of Baluchistan
  - northern Sindh and neighbouring districts of Baluchistan
  - border areas of Pakistan and Afghanistan in northern/central NWFP, particularly FATA areas, including Khyber, the Peshawar valley, and Eastern Region Afghanistan
  - border areas of southern NWFP, particularly FATA areas, and neighbouring South Eastern Region Afghanistan
  - southern Punjab
  - Karachi
- **Accessing children in security compromised areas:** In some of the areas outlined above, most notably the regions of Afghanistan bordering Pakistan (especially Southern Region), and those areas of Pakistan bordering Afghanistan (especially the FATA areas in NWFP and some areas of Baluchistan) access to some communities is compromised by ongoing conflict or security risks. Efforts to improve access are ongoing, but additional mechanisms to improve access in these areas, including "days of tranquility" where appropriate, must be identified and implemented.

- **Accessing mobile populations:** Progress has been made in identifying and targeting mobile populations, but genetic data demonstrates that population movement still plays a role in WPV transmission, and continued efforts will be needed to ensure that mobile populations are reached.
- **Improving and adequately monitoring SIA quality in poor performing areas:** Despite the overall improvements in SIA quality, there are clearly still high risk areas where quality is an issue, often due to lack of local government oversight and commitment.
- **Maintaining enthusiasm and engagement:** Political and community commitment and engagement must be maintained until polio is eradicated from Afghanistan and Pakistan.
- **Ensuring adequate resources to complete the job:** Tremendous efforts have been made by partners and both governments to identify resources over the course of the initiative. However the global funding situation in 2007 is extremely tight and it is vital to mobilize additional funds (including domestic funds) quickly to be able to implement planned activities.

4 Conclusions and recommendations

Conclusions

The programmes in both countries have made tremendous strides, particularly in the past 18 months, including:

- significant re-affirmation of political commitment at national and sub-national levels
- major efforts to coordinate activities between the national programmes to reach mobile populations and to cover border areas
- successful introduction of mOPV1 with a subsequent clear impact on WPV1 transmission
- incremental improvements in SIA quality in several high risk areas
- maintenance and improvement of generally very sensitive AFP surveillance systems in both countries
- introduction of a new laboratory testing algorithm which allows the Regional Reference Laboratory at NIH to provide results to the programmes in both countries on average within 3 weeks of onset of paralysis (the fastest delivery of results in the world)
- incremental improvements in routine immunization coverage in most areas of both countries
- the development of a communications and social mobilization strategy which has successfully dealt with threats to the programme

The vast bulk of the people of Afghanistan and Pakistan now live in areas that are polio-free. Wild poliovirus transmission continues only in well known and restricted areas of both countries, including bordering provinces and districts in Afghanistan and Pakistan. **More than 90% of all WPV reported from Afghanistan and Pakistan occurs in these known and discrete zones of transmission, and they are the source for all viruses identified outside these areas. T**ransmission continues in these areas because children are not adequately immunized due to one or more of the following factors:

- access is difficult due to security reasons
- there are mobile populations and significant population movement
- operational quality remains weak, often because local government ownership and engagement is inadequate.

These known high risk areas in both countries are the major risk for ongoing transmission of wild poliovirus in 2007, and pose a risk to all polio-free areas. Children in these areas must be consistently reached in immunization campaigns, and full use must be made of monovalent OPVs in these areas to derive the greatest possible effect from each immunization opportunity.

The TAG is confident that transmission of wild poliovirus in both Afghanistan and Pakistan can be interrupted, despite the issues beyond the control of the national programmes that are affecting implementation of activities, provided that appropriate steps are taken immediately to improve access and raise immunity in children in the remaining transmission areas. This will require continued engagement and commitment by both national governments, by provincial and district governments in both countries, and by partners.

Recommendations

General approach

The TAG considers that general approach to the final stage of polio eradication by both the Afghanistan and Pakistan programmes should continue to consist of the following components:

- Concentration of effort on known remaining areas of transmission and high risk, particularly to achieve local government and community engagement, access in security compromised areas, and operational quality in both supplementary immunization and surveillance activities.
- Maintenance of high levels of overall population protection by periodic NIDs and by further improvements in routine immunization coverage of infants.
- Rapid detection and response to any importation of wild poliovirus into polio-free areas through the maintenance of excellent surveillance capable of detecting importations quickly, and appropriate mop-up responses once an importation is detected.

***Supplementary Immunization Activities (SIAs) and vaccines of choice* :**

The TAG endorses the following SIA plans in Afghanistan and Pakistan for the period May to December 2007, which comprises a total of 2 NID and 3 SNID rounds in each country:

- **To stop transmission in the remaining high risk areas:**
  - two mop-up quality SNID rounds in designated high risk areas of Afghanistan and Pakistan in May and June, in principle covering the following areas:
    - Afghanistan: Southern, South-Eastern, and Eastern Regions
    - Pakistan: the high risk districts of northern Sindh and neighbouring districts of Balushistan; northern/central NWFP; southern NWFP; the Quetta/Killa Abdullah/Pishin area of Baluchistan; southern Punjab; and Karachi
  - a mop-up quality SNID round in November - December, for planning purposes on the same scale as the May and June rounds
  - the vaccine of choice for these rounds should be as follows:
    - May round: mOPV1 in all targeted areas of Afghanistan and Pakistan except northern Sindh/neighbouring Baluchistan area and Karachi where tOPV should be used;
    - June round: mOPV3 in all targeted areas of Afghanistan and Pakistan, if available; if mOPV3 is not yet available, tOPV should be used where WPV3 is still occurring, and mOPV1 in all other areas;
    - November/December round: a mix of mOPV1 and mOPV3 depending on epidemiology.

- **To maintain overall population immunity:**
  - two full national immunization rounds (NIDs) in the period August to October
  - the vaccine of choice for the two NIDs should be tOPV in most areas, with mOPV as indicated by epidemiology in high risk areas
- **To respond to any introduction of wild poliovirus in polio - free areas outside the high risk zones:**
  - any WPV detected outside the high risk zones targeted for the SNIDs should be responded to as per global recommendations, i.e. three mop-up rounds in an epidemiologically relevant area, covering a minimum of 2 million children under five years
  - the vaccine of choice should be the appropriate monovalent OPV
  - since mOPV will be used, the interval between each round can be shortened to 2 weeks if operationally feasible, to improve the speed of completion of the response.
- **Licensure of mOPV3 in Pakistan:** it is imperative for a monovalent OPV3 to be licensed for use in Pakistan as rapidly as possible to enable its use in the June SNID round; (in Afghanistan, MOH clearance of mOPV3 will be based on WHO recommendation of this vaccine for purchase by UN agencies).
- **Consultation with the TAG:** the TAG is available for consultation by telephone or email to discuss the final extent or choice of vaccine for particular rounds or particular areas.

Coordinating activities in border areas

The TAG notes the tremendous efforts made by the programmes in both countries to coordinate activities in border areas.

- As far as is possible the dates of SIAs should be coordinated between the two countries
- Efforts to coordinate activities in border areas should continue, in particular the regular contact between provincial and district teams in Afghanistan and Pakistan, the mapping of villages and communities to ensure they are reached by the responsible teams, and the sharing of surveillance and SIA information
- Border crossing immunization posts, particularly those immunizing large numbers of children should be continued until wild poliovirus transmission is interrupted
- Data categories and definitions, including data on the immunization status of AFP cases and SIA monitoring data, should be reviewed by the two national teams to harmonize those in use and ensure a common understanding of data coming from each programme.

Improving access and operational quality of SIAs

- Every effort should be made by the Government of Afghanistan, the military forces in Afghanistan, and the partners, to arrange Days of Tranquility to cover supplementary immunization rounds in security compromised areas. The coming visit to Afghanistan by the Director General of WHO and Regional Director, EMRO should be used to lobby for this.
- Special attention should continue to be paid to the known zones of transmission in both countries, with regard to the deployment of staff from other areas, the engagement of district administrations, communications and social mobilization activities, and monitoring activities, to ensure the best possible access and quality in these areas during SIAs.
- National and provincial government in Afghanistan and Pakistan should ensure that district officials in transmission zones are committed to ensuring quality activities and are held accountable for ensuring that every effort is made to reach all children.

- Continued efforts should be made in both countries to identify and immunize mobile populations both during SIAs and at appropriate opportunities between immunization rounds.
- Monitoring of SIA quality should be reviewed to ensure:
  - full use is being made of measures such as surveys of finger marking of children, particularly in congregation points such as markets and transit stations;
  - that methodology is standardized between provinces and as far as possible between countries;
  - that all opportunities are taken to use independent, reliable monitors;
  - that indicators are periodically verified for their accuracy and usefulness.

Communications and social mobilization

The TAG notes that international communications reviews for the polio programmes in Afghanistan and in Pakistan will be carried out in coming months. These reviews will provide more specific recommendations for communications and social mobilization activities.

- The TAG emphasizes the need for sustained media activities at all levels between and during campaigns, for polio and routine EPI. The impact of "Polio True Stories" in Pakistan appears to be positive and maximum use should be made of this.
- Communications and social mobilization efforts require cross-sectoral support and the programmes in both countries should ensure the engagement of all relevant government and other agencies.
- Coordination of communications and social mobilization activities in border areas should be ensured through meetings of programme staff at the local level to ensure that critical activities, such as social mapping, are carried out and that appropriate community figures are engaged.
- The national programmes should continue to mount rapid communications responses to misinformation/ negative press regarding polio eradication activities, and to maintain a proactive approach to ensure the support and engagement of media.
- Further efforts should be made to refine and target messages specifically for high risk reservoir area communities.

Ensuring adequate resources

- In order to facilitate government and partner agency resource planning, a three year plan should be produced as rapidly as possible by the national programmes in both Afghanistan and Pakistan, outlining broad activities and resource requirements assuming different scenarios of when wild poliovirus transmission will be interrupted.
- This plan should detail known government and partner sources of funds, and should be used to approach governments and partners help raise further resources.

Strengthening routine immunization

- The incremental improvements in routine EPI coverage in most areas of both countries is encouraging. The TAG urges both Afghanistan and Pakistan to continue their efforts to develop effective and sustainable routine immunization programmes.
- Considerable increases in routine immunization coverage are reported from a number of high risk districts in Pakistan (i.e. Southern Punjab) engaged in intense polio eradication activities. The TAG reminds polio teams at all levels to fully exploit all opportunities offered by the PEI to strengthen routine immunization services.