WHO-EM/POL/285/E

Report on the

Third meeting of the Regional Technical Advisory Group for Poliomyelitis Eradication

Cairo, Egypt
26–27 June 2005

World Health Organization
Regional Office for the Eastern Mediterranean

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1. INTRODUCTION

The third meeting of the Regional Technical Advisory Group on Poliomyelitis Eradication (Technical Advisory Group) was held in the WHO Regional Office for the Eastern Mediterranean, Cairo, Egypt on 26–27 June 2005, under the chairmanship of Dr Ali Jaafar Mohamed Sulaiman.

The meeting was opened by Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean, who welcomed the Technical Advisory Group, members of partner agencies and WHO headquarters and field staff. He detailed the progress being made in the polio-endemic countries of the Region, with evidence of reduced poliovirus transmission, but noted that the programme had faced setbacks with outbreaks following virus importations into Sudan and Yemen.

Dr Gezairy emphasized that the pressing priorities were to interrupt poliovirus transmission in the remaining endemic countries and to stop circulation in the re-infected countries. In addition, a high priority was to intensify activities throughout the Region to guard against spread should importations occur.

The programme and list of participants are attached as Annexes 1 and 2 respectively.

2. FOLLOW-UP OF RECOMMENDATIONS OF THE SECOND MEETING OF THE TECHNICAL ADVISORY GROUP

Dr M. H. Wahdan, Special Adviser to the Regional Director on Poliomyelitis Eradication, reported on the implementation of the 27 recommendations made by the second meeting of the Regional Technical Advisory Group for Polio Eradication.

The Regional Technical Advisory Group noted with appreciation the comprehensive manner in which the recommendations of its first and second meeting have been implemented. The majority of the recommendations have been energetically pursued and have served to advance polio eradication in the Region. In particular, the Regional Director, through his solid advocacy during country visits and meetings with country and provincial leaders, has secured commitment resulting in strong support to programme activities. The Regional Director and WHO made a vital contribution to global polio eradication by advocating with the religious authorities in Nigeria to accept immunization with poliovaccine, consequently allowing the Government of Nigeria to institute effective campaigns of immunization.

The Regional Office and Member States have largely acted on recommendations directed at strengthening the technical component and management of polio eradication activities, including the implementation of supplementary immunization activities, development of polio eradication in a manner that can be “mainstreamed” for routine immunization, sharing of experience between countries, improved definition of high-risk areas both for supplementary immunization activities and for acute flaccid paralysis (AFP) surveillance and in the use only of pre-qualified oral poliovaccine in all countries.

However, the Regional Technical Advisory Group expressed concern that the financial resources contributed by countries of the Region remain inadequate, despite appropriate briefing and

requests from Regional Office staff. The reason for the failure to mobilize additional financial resources from countries to support polio eradication in a Region which includes several prosperous countries is unclear. All countries will secure much benefit, both financially and technically, once polio is eradicated, with greater benefit the sooner this is achieved. If, regrettably, the funding gap is not closed, it is possible that key activities will have to be curtailed, causing delayed regional polio eradication, ultimately resulting in a far higher cost.

Recommendation 1. There is a significant funding gap affecting polio eradication, amounting to US$ 50 million globally in 2005 and US$ 200 million in 2006. Of this, US$ 5 million in 2005 and US$ 50 million in 2006 are required for work in countries of the Eastern Mediterranean Region. These figures will need to be reviewed regularly to ensure the resource requirements created by the current volatile polio situation are being fully met. The Technical Advisory Group reiterates the need to further pursue additional funding from within the Region, basing this recommendation on the undeniable fact that all countries are at risk of poliovirus importations, possibly with consequent spread, and that polio eradication is cost effective and will ultimately lead to considerable savings.

3. IMPORTATION OF POLIOVIRUSES

The current polio situation in Sudan, Yemen and the countries of the Horn of Africa is the result of uncontrolled endemic polio in Nigeria, with subsequent explosive spread across the African continent. Although progress has been made in Nigeria, transmission still persists in the country with continuing risk of virus spread, and countries of the Eastern Mediterranean Region remain at risk of importations from this source.

The Regional Technical Advisory Group appreciates the work conducted by the Regional Office and Member States during the past year to recognize the risk of poliovirus importation, including through the preparation of national plans of action. However, the steady progress towards polio eradication in the Region has been disrupted by two major outbreaks: one in Sudan caused by a virus imported from Chad but originally from Nigeria; and one in Yemen caused by a virus from Sudan. Smaller episodes have occurred in Saudi Arabia and there has been considerable cross-border transmission into Ethiopia, all originating from Sudan.

Although the two major outbreaks in Sudan and Yemen appear to be nearly under control, areas with persisting transmission in Africa, particularly in Ethiopia, clearly pose a considerable threat of importation to other countries. While this threat potentially affects all countries of the Region, the greatest danger lies in certain bordering countries, notably Djibouti and Somalia. Although these countries realistically cannot prevent importations occurring, they can prevent or limit subsequent spread by ensuring the absence of any immunity gap, especially in children under 5 years, and by ensuring the presence of effective AFP surveillance among all populations.

In addition, other countries of the Region where national immunization day campaigns (NIDs) have not been conducted for several years, with the consequent risk of possible immunity gap or those countries with significant immigrant populations, including from countries with wild poliovirus transmission, must be regarded as being at significant risk of persistent transmission in the event of an importation.

Recently infected countries need to appreciate that, even if they have recently stopped previous poliovirus transmission, further importations and subsequent re-infection may still occur as long as wild polioviruses continue to circulate in the Region or in neighbouring countries.

The detection of “orphan” viruses strongly indicates defects in poliovirus surveillance either in certain countries of the Eastern Mediterranean or in their neighbours. This defect serves to enhance the risk of undetected spread or unexpected importations.

Recommendation 2. The Regional Technical Advisory Group recommends that countries of the Region should aim to limit the spread of any importation by identifying all immunity gaps in their child populations, both nationally and among specific groups. Any such gap should be eliminated through specific targeted immunization activities, including campaigns focused on susceptible groups, either locally or nationally, until uniform high coverage has been achieved. While this recommendation applies to all countries, it merits the highest priority in Somalia, in Djibouti and among the children of immigrant workers living either legally or illegally in countries of the Region, notably the countries of the Gulf Cooperation Council or countries where NIDs have not been conducted for several years.

Recommendation 3. The Regional Technical Advisory Group is convinced of the real risk posed by potential wild poliovirus importation to all countries. This constitutes a potential but avoidable public health emergency. In view of this conviction, the Regional Technical Advisory Group urges the Regional Director to include the topic of polio eradication on the agenda of the Regional Committee in September 2005. The agenda item should cover such topics as the risk of importations, supplementary immunization activities, financial issues and surveillance.

4. COMMITMENT TO POLIO ERADICATION

The Regional Technical Advisory Group continues to be impressed by the outstanding commitment of responsible national authorities to polio eradication. This has been especially evident in those countries in which a successful outcome has proved difficult to achieve, requiring many rounds of supplementary immunization campaigns and intensive AFP surveillance demanding much staff time. It appears possible that zero recorded/detected polio cases could be recorded within the next 12 months. It is critical that all countries of the Region, especially those that are still or were recently endemic for poliovirus transmission, are committed to preserving essential components of the eradication initiative through to eventual certification, which may be several years away.

Recommendation 4. In-country international staff and visiting WHO/UNICEF advisers should ensure, through their contacts and discussions with Ministry officials, that national staff are fully aware both of the need to ensure effective immunization against polio, avoiding the development of immunity gaps, and for preserving AFP surveillance for at least 5 years through to certification of polio eradication and cessation of the use of oral poliovaccine (OPV).

5. ROUTINE IMMUNIZATION SERVICES

The eradication of polio requires virtually complete immunization of all children under 5 years of age. Realistically, at this stage, in countries with routine immunization not reaching over 90% of children, this will only be achieved through supplementary immunization activities maintained for several years until either routine services are developed or OPV is no longer used.

In several countries of the Region, routine immunization services remain poor. In such countries, if supplementary immunization activities are not conducted regularly, there will be a build-up of susceptibles and, following an importation, as occurred in Yemen, a major outbreak may result. It is important for staff responsible for polio eradication to adopt a broad-based strategy aimed at the development of effective routine immunization services, aiming to ensure full immunization of every child against all vaccine-preventable diseases, not just against polio.

Recommendation 5. The Regional Technical Advisory Group urges that staff dealing with polio eradication should aim to strengthen routine immunization as one of the key strategies of their work ultimately for child health. While eradicating poliovirus transmission is the key priority, polio activities should avoid any damage to the development of routine immunization.

Recommendation 6. The experience and benefits of the polio eradication initiative should be used to strengthen the development of routine immunization services. In view of the difficulties encountered in pursuing this as a part of regular polio eradication activities, the Regional Technical Advisory Group recommends that a consultation be convened in which this topic is the main agenda item. Participants should be individuals experienced in both polio and Expanded Programme on Immunization (EPI) development, including national EPI managers.

6. COUNTRY UPDATES: CHALLENGES

6.1 Pakistan

The Regional Technical Advisory Group noted with appreciation both the progress being achieved in Pakistan and the apparent strong commitment of senior provincial officials to ensure effective work in the remaining endemic districts in Punjab.

There is some concern that the problems identified are the same ones, even if in more limited areas and with increasingly focused corrective measures, as those reported 2–3 years ago, e.g. the period of mother/child isolation after childbirth, the shortage of female vaccinators, a conservative approach to house-to-house visits and immunization. These areas now appear relatively limited but merit increased attention with intensification of supplementary immunization activities if remaining virus transmission is to be interrupted.

While appreciating the significant progress made by Pakistan towards polio eradication, the Regional Technical Advisory Group expressed its continuing concern at the high risk of possible continuing poliovirus transmission in a limited number of insecure areas, with special concerns for southern Punjab, northern Sindh and tribal areas of North-West Frontier Province.

Given the size of Punjab, its high population and population density, allied to its increasing importance as the possible focus for the last persistent poliovirus transmission, the Technical Advisory Group is concerned to ensure that provincial staff are supported as fully as possible and that senior experienced advisers should be present at all times in the affected areas.

Recommendation 7. The Regional Technical Advisory Group, recognizing the intensified commitment to ensuring effective supplementary immunization activities and AFP surveillance in the affected areas of southern Punjab, stresses again the need to identify high-risk areas and populations, map risk areas, guarantee effective planning and management where it is most needed and ensure accurate feedback to responsible officials at the highest provincial and national levels.

Recommendation 8. The Regional Technical Advisory Group is pleased to note the apparent commitment and high level of involvement in polio eradication of senior provincial and district officials. It urges polio staff to capitalize on this initial involvement by ensuring regular follow-up, briefings and feedback to these officials to ensure continuity of their direct involvement.

Recommendation 9. In order to strengthen local expertise and management, the Regional Technical Advisory Group recommends that an experienced international adviser should be appointed for southern Punjab, with terms of reference to guarantee the quality of work in the high-risk districts and identify and implement solutions to problems posed by conservative, tribal or nomadic communities in the area, in full coordination with the senior provincial adviser.

6.2 Afghanistan

While in Pakistan the remaining constraints appear to relate to unsatisfactory management in some key districts, the main problem in Afghanistan remains poor security in the south of the country known to be endemic for 2 lineages of type 3 poliovirus. In the absence of any immediate resolution to this problem, it will be necessary to develop innovative planning with the maximum involvement of local groups or individuals and to intensify present activities in provinces known still to be high risk.

The Regional Technical Advisory Group recognizes that reaching the quality of work needed to guarantee polio eradication may prove difficult and appreciates that any resource that increases the chance of success should be pursued positively. It is probable that the strategic use of monovalent type 3 vaccine, as an adjunct to the routine use of tOPV, would be beneficial.

Recommendation 10. The Regional Technical Advisory Group recommends that a number of supplementary activities should be conducted, targeted specifically at Urozgan and adjacent provinces:

- as a national policy, focus additional attention on Urozgan, Kandahar and Helmand, identifying and supplying any resources needed to improve performance;

- conduct an additional supplementary immunization round in Urozgan and neighbouring provinces in August;

- ensure that the September round, especially in known polio-endemic areas, reaches satisfactory quality, making contingency plans to avoid its disruption by the election process.

6.3 Horn of Africa

With increasing optimism that sound progress is being made in Asia and despite the polio threat persisting in Nigeria, it is apparent that polio in the countries of the Horn of Africa currently constitutes the greatest emerging threat to global eradication of the disease. If transmission becomes widespread in Ethiopia or becomes re-established in Somalia, there would be potential both for further spread and for immense difficulty in again reaching polio-free status.

The Regional Technical Advisory Group is satisfied that planned supplementary immunization activities are conducted satisfactorily in a timely manner, with enhanced AFP surveillance in Djibouti and Somalia and with the improving situation in Sudan. The Regional Office has implemented the most urgently and critically needed activities. It is vital that these activities are closely monitored to guarantee their quality, particularly through appropriate field visits and assessments, especially in Somalia.

Should poliovirus transmission extend in Ethiopia or become established in Somalia, the resulting epidemic would cross national boundaries and would require actively coordinated activities to control. It is doubtful whether there is, at present, an adequate mechanism to ensure cross-border coordination and to assure the quality of activities needed.

The Regional Technical Advisory Group expressed deep concern that monitoring of the supplementary immunization campaigns conducted to date in Somalia indicates coverage between 59% and 90%. These levels, especially at the lower end of the range, are insufficient to stop transmission from becoming established should wild polioviruses be introduced, and unless corrected, will potentially lead to extreme difficulties in regaining polio-free status.

Recommendation 11. High priority must be given to ensuring much improved coverage during supplementary immunization activities in Somalia. The Technical Advisory Group recommends an urgent consultation to review data on the existing situation, develop appropriate strategies, identify how these may be implemented and the resources needed to ensure much improved performance.

Recommendation 12. The WHO Regional Offices for the Eastern Mediterranean and for Africa, possibly through headquarters, should establish a mechanism to ensure full coordination of polio eradication activities in the countries in the Horn of Africa. Once identified, this mechanism and the people responsible should meet frequently to resolve critical issues, provide cross-border information, meetings, data, coordinated activities etc.

Recommendation 13. The coordination mechanism between the Regional Offices for the Eastern Mediterranean and for Africa should involve, in addition to countries of the Horn of Africa, countries west and south of Sudan (Chad, Central African Republic and Democratic Republic of the Congo), where gaps in surveillance could conceal potential foci for importations into countries of the Region.

7. MONONVALENT TYPE 1 ORAL POLIOVACCINE

The Regional Technical Advisory Group is convinced that the potential benefits of mOPV1, e.g. the lack of “interference” from types 2 and 3, higher levels of humoral immunity and its potential single dose impact in susceptible children, outweigh any possible drawbacks such as delaying the development of type 2 and 3 immunity.

Recommendation 14. While emphasizing that tOPV remains the oral poliovaccine of choice for routine immunization, the Regional Technical Advisory Group recommends that, provided limitations on supply are overcome, mOPV1 should be used in countries endemic for wild type 1 poliovirus and to ensure immunity in countries at high risk with an immunity gap. While establishing this principle, the Regional Technical Advisory Group recommends maintaining strategic flexibility so that appropriate vaccine use can be established in any given situation.

Recommendation 15. The Regional Technical Advisory Group recommends that, as soon as adequate supplies of mOPV1 can be guaranteed, it should be used to control the present volatile and potentially dangerous polio situation in Djibouti, Somalia, Yemen and in Pakistan, again emphasizing that tOPV will remain the vaccine of choice for routine immunization in these countries.

Recommendation 16. The Regional Technical Advisory Group endorses the clinical trial of mOPV1 being planned for Egypt and urges that attempts be made to assess the vaccine’s impact in terminating the epidemic in Yemen.

Recommendation 17. In view of the difficulties being encountered in Afghanistan in stopping transmission of wild poliovirus type 3, the Regional Technical Advisory Group urges WHO to proceed with the development and licensing of a monovalent type 3 OPV to allow its operational use, as well as its inclusion in the vaccine stockpile.

8. SURVEILLANCE

The Regional Technical Advisory Group noted the high levels of success being achieved in establishing AFP surveillance throughout the Region. It noted further the use of the AFP surveillance system for strengthening surveillance for other communicable, especially vaccine-preventable, diseases.

Progress has been made in advancing the sensitivity of the system and sufficient experience has been gained, once this experience is fully shared and utilized in endemic countries, to ensure that polio cases are detected promptly.

The experience with diagnostic delay in suspecting polio cases in Yemen illustrates the potential pitfalls when staff, unused to diagnosing polio, are distracted with urgent demanding responsibilities outside AFP surveillance.

The Regional Technical Advisory Group noted with appreciation the outstanding and highly professional contribution of the laboratory network to ensuring the success of AFP surveillance. The reduction in the number of days to identify isolates than original targets and the development of new molecular techniques within the Region provides an invaluable resource. The Regional Technical Advisory Group noted that, with a recent marked increase in workload, the laboratory network was near its full capacity and great care must be taken before submitting it to any further additional demands.

Recommendation 18. The extensive programme of surveillance reviews should be prioritized so that the greatest attention is directed to those countries where sensitivity needs to be at its highest, mostly the countries with persistent poliovirus transmission, at high risk of importations or where indicators show suboptimal performance.

Recommendation 19. The Regional Technical Advisory Group accepts the principle that national policy determines what constitutes a “hot” case and that this definition will continue to guide the urgency and intensity of epidemic investigation and the seniority of the staff conducting it. The use of this system, while not currently achieving greater speed in securing laboratory confirmation of diagnosis, is a useful adjunct to ensuring sensitivity in AFP surveillance and is important especially in areas where such surveillance is suboptimal.

Recommendation 20. The testing of samples from contacts of an AFP case is an important way of increasing AFP sensitivity and should receive priority in those areas where additional surveillance data are required, e.g. areas of conflict with limited access, remote areas difficult to visit and ensure specimen collection. However, investigation of cases when inadequate or no stool specimens have been collected from the index AFP case should always be considered an indication for the collection of contact samples.

Recommendation 21. WHO should encourage national authorities to strengthen their support and commitment to the laboratory network in the Region, several laboratories of which have emerged as centres of excellence and are valuable national, regional and global resources. Support for improvement of laboratory facilities to biosafety level 3-polio will be needed in one or more regional laboratories to allow them to be able to work in the post-OPV era.

9. ACHIEVEMENTS IN SOUTH SUDAN

The Regional Technical Advisory Group greatly appreciated what has been achieved in south Sudan. Programme success represents a tremendous tribute to the personnel involved on the ground and also to the capacity and understanding of the Regional Office in providing critical support.

In establishing a system able to plan supplementary immunization activities and conduct AFP surveillance, a strong infrastructure has been established which on occasion represents the only source of skill available to conduct other health interventions. This is demanding of polio staff time and, while accepting the need for broad-based health interventions, needs to be kept in proportion so that polio work does not suffer or standards fall below an acceptable level.

Recommendation 22. While country-based polio staff will always be available to support other health initiatives and programmes, this support should not overwhelm their capacity to perform polio-related duties to a satisfactory level. Accordingly, WHO should guarantee the quality of their polio work by ensuring that all programmes have adequate resources, both financial and human, to achieve their objectives without posing excessive difficulties for polio staff.

Recommendation 23. WHO should strengthen advocacy for polio eradication with national and international groups working in southern Sudan, bringing awareness of strategies, needs and progress to a higher level.

Annex 1

PROGRAMME

Sunday, 26 June 2005

08:00–08:30	Registration
08:30–08:45	Opening session Address by Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean
08:45–09:00	Follow up on implementation of the second meeting recommendations, Dr M.H. Wahdan, WHO/EMRO
09:00–11:00	Progress towards polio eradication: Regional overview, Dr F. Kamel, WHO/EMRO Pakistan overview, Dr Anthony Mounts, WHO/Pakistan Afghanistan overview, Dr Tahir Mir, WHO/Afghanistan Global overview, Dr B. Aylward, WHO/HQ
11:00–11:30	Discussion Monovalent OPV
11:30–12:45	Vaccine characteristics, Dr B. Aylward, WHO/HQ Operational experience in Egypt and clinical trial, Mr J. Abdelwahab, WHO/EMRO Questions to the Regional Technical Advisory Group
12:45–13:30	Preparedness and response to importations Surveillance progress and issues, Dr F. Kamel and Dr H. Asghar, WHO/EMRO
14:30–14:45	Discussion
14:45–16:00	Sudan experience, Dr S. Haithami, WHO Sudan Yemen experience, Ms A. Christie, Horn of Africa Population immunity and supplementary immunization plans, Dr M. Wahdan/Dr A. Elkasabany, WHO/EMRO Questions to the Regional Technical Advisory Group
16:00–16:45	Discussion
16:45–17:30	Closed Meeting of Regional Technical Advisory Group

Monday, 27 June 2005

08:30–09:30	Meeting of Regional Technical Advisory Group members
09:30–09:45	Regional certification activities, Dr J. Hashmi, WHO/EMRO
09:45–11:30	Preparing for OPV cessation: Introduction/rationale/risk, Dr B. Aylward, WHO/HQ Regional preparedness for prerequisites, Dr H. Ashgar/Dr A. Elkasabany, WHO/EMRO
11:30–12:30	Finalization of recommendations
12:30–13:30	Closing session

Annex 2

LIST OF PARTICIPANTS

Members of the Regional Technical Advisory Group

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Other Organizations

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