

Planning for the elimination of blinding trachoma in the Eastern Mediterranean Region

Report on a regional workshop

Cairo, Egypt
28–30 November 2005



**World Health
Organization**

Regional Office for the Eastern Mediterranean



THE RIGHT TO SIGHT

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1. Introduction

In order to enhance the elimination of blinding trachoma from the Eastern Mediterranean Region, a regional planning workshop was held in Cairo organized by the WHO Regional Office for the Eastern Mediterranean in Cairo in collaboration with the International Agency for the Prevention of Blindness (IAPB) and the Global Alliance for Trachoma Elimination. The agenda and programme are included as Annexes 1 and 2. The participants included the Ministers of Health of Egypt and Sudan, His Royal Highness Prince Abdulaziz bin Ahmed Al Saud, Chairman, IAPB, representatives from Member States with a known problem with blinding trachoma, representatives of several nongovernmental organizations and collaborating centres and trachoma experts. A list of participants is included in Annex 3.

The meeting was opened by Dr Hussein A Gezairy, WHO Regional Director for the Eastern Mediterranean, who noted that trachoma was one of the oldest infectious diseases and a preventable cause of blindness. Blinding trachoma remained a public health problem in many Member States of the Region. Great potential to eliminate this problem had already been shown in several countries of the Region. The Regional Office would provide the necessary technical support to Member States and coordinate with other organizations to achieve the goal of global elimination of blinding trachoma in the Region by 2020, he said.

Trachoma was a neglected disease closely linked to poverty. In many of the countries of the Region trachoma was not a priority, but by alleviating poverty and linking trachoma to the Millennium Development Goals (MDGs) the process of blinding trachoma elimination would be advanced. He expressed the hope that the governments of endemic countries would take the necessary steps to develop national plans for trachoma elimination and allocate resources necessary for the implementation of the WHO-

recommended strategy. The full text of Dr Gezairy's address is included as Annex 4.

During his address, His Royal Highness Prince Abdulaziz bin Ahmed Al Saud stressed the significance of trachoma as a preventable cause of blindness and acknowledged the attention given to it by countries of the Region. He noted that trachoma control programmes had been initiated in several of the affected countries in the Region and that a few of them were on the verge of eliminating blinding trachoma. The meeting would provide an important opportunity to exchange experiences and opinions concerning the challenges faced in implementing programmes for control of trachoma, and resolving these challenges through discussion and research. It was recognized that many of the countries in the Region lacked accurate statistics concerning the prevalence and distribution of trachoma and its causes, which was further compounded by the paucity of human, technical and financial resources to undertake programmes for control of trachoma. He emphasized the importance of technical cooperation between countries of the Region to maximize the use of available resources.

Her Excellency Dr Tabitta Botros Shokai, Federal Minister of Health, Sudan, noted that active and blinding trachoma were known health problems in Sudan, especially in southern Sudan. It was estimated that about 21 million people were at risk of contracting active trachoma, and more than 700 000 suffered from advanced complications of the disease. Trachoma control had been operative since the early 1960s as part of the Prevention of Blindness Administration, and good achievements had been made. After the prevalence of trachoma had started to rise again, the programme had been revived under the umbrella of VISION 2020. The trachoma control programme had been decentralized and was implementing all components of the WHO-recommended strategy. The programme had support from the highest levels in Sudan. The year 2015 had been set as the target date for elimination of trachoma from Sudan.

His Excellency Dr Mohamed Awad Tag El-Din, Minister of Health and Population of Egypt, noted that Egypt's history of

trachoma control dated back to the pharaonic period. Although considerable socioeconomic development had taken place in Egypt, trachoma still existed in some areas. Egypt was committed to controlling trachoma. The Ministry would make all efforts to integrate control of trachoma in ongoing health programmes and looked forward to the technical and financial support of WHO and other agencies to assist efforts in this regard.

Dr A. Mohit, Director, Health Protection and Promotion, WHO Regional Office for the Eastern Mediterranean, outlined the scope and purpose of the workshop and its expected outcomes. It was expected that over the course of the meeting the participants would come out with recommendations leading to a regional strategy aiming to enhance the elimination of blinding trachoma from the Region.

Dr Abdulaziz Al Rajhi and Dr Sherif Khalifa were elected as Chairmen. Dr Haroon Awan and Dr Mohammed Babar Qureshi served as rapporteurs.

2. Burden of trachoma and the SAFE strategy

Dr Abdul Hannan Choudhury, WHO EMRO

Trachoma is the world's leading cause of preventable blindness. It is also a neglected disease and is linked to poverty. Globally, an estimated 8 million are visually impaired due to trachoma, 84 million have active infection and 1.4 million are blind due to trachoma. Infectious trachoma remains endemic in poor communities and mostly affects mothers and children with prevalence of infection being highest in 1 to 5 year-olds. Women are blinded up to three times more than men.

In the Eastern Mediterranean Region, an estimated 10 million people are affected with active trachoma and about 80 million people in endemic areas need treatment for trachoma. Blinding trachoma still exists in pockets in Afghanistan, Djibouti, Egypt, Islamic Republic of Iran, Morocco, Oman, Pakistan, Saudi Arabia, Sudan and Yemen. The Region accounts for 12% of the global burden of blinding trachoma, with the highest burden in Egypt and Sudan (Table 1).

Table 1. Trachoma prevalence in selected countries of the Region

Country*	Country population estimate for 2004 (UN statistics)	TF/TI cases all ages	TT cases all ages	Prevalence % TF/TI in <10 years	Number to treat in low endemic areas (prevalence <10% = number of TF/TI x 3)	Number to treat in high endemic areas (prevalence >10% = all population in affected areas)
Afghanistan	22 998 000	270 882	295 174	3.60	812 647	
Djibouti	817 000	3 788	3 157	0.60	11 363	
Egypt	69 323 000	3 237 247	305 390	35.60		30 021 100
Iran, Islamic Republic of	70 329 000	17 006	26 510	2.40	51 018	
Iraq	26 503 000	131 120	82 778	2.40	393 359	
Libyan Arab Jamahiriya	5 843 000	25 001	14 158	20.00		473 500
Morocco	30 509 000	17 134	15 407	N/A	51 402	
Oman	2 651 000	4 863	6 600	0.60	14 588	
Pakistan	151 816 000	521 942	240 918	2.40	1 565 825	
Somalia	8 298 000	22 238	12 727	0.90	66 713	
Sudan	34 512 000	3 494 390	651 673	37 - 18.5		31 094 254
Yemen	21 003 000	2 043 206	60 516	30.00		13 815 902
Total					2 966 915	75 404 756

Source: Second Global Scientific Meeting on Trachoma, Geneva 25-27 August 2003

TF Inflammatory trachoma (follicles)

TI Inflammatory trachoma (intense)

TT Trichiasis of trachoma

* In the country reports, the Islamic Republic of Iran, Morocco and Oman reported that they no longer have blinding trachoma

In 1997, WHO and several international nongovernmental organizations formed a partnership to eliminate blinding trachoma by 2020 called the WHO Alliance for the Global Elimination of Trachoma by 2020 (GET2020). It was considered a priority when the VISION 2020 global initiative (IAPB and WHO) was established. Following socioeconomic improvements there have been significant achievements in the Region with regard to the control of blinding

trachoma. Substantial progress has been reported towards the elimination of blinding trachoma in the Islamic Republic of Iran, Oman and Saudi Arabia. Morocco has applied the WHO-recommended strategy in the five endemic provinces of the south, and in 2005 vertical accelerated control of the disease was no longer considered needed, starting the post-endemic surveillance phase.

WHO recommends implementation of the SAFE strategy (surgery for trichiasis, antibiotic treatment, facial cleanliness and environmental change) for achieving the elimination of blinding trachoma. Research over the years has shown that antibiotic therapy enhances the chances of eliminating blinding disease. Antibiotics clear the infection in the individual and suppress transmission in the community. The donation by Pfizer of azithromycin (Zithromax) through the International Trachoma Initiative (ITI) in the framework of the SAFE strategy has been a major step forward towards controlling blinding trachoma.

It is recognized that for the elimination of blinding trachoma, it is essential to develop a national plan by involving all sectors to implant the SAFE strategy and a task force that can determine the human resources, supplies and equipment that is necessary for its control and to follow-up and evaluate the interventions. Control of trachoma requires an effective community-based approach that depends on existence of a functioning primary health care system.

In conclusion, trachoma remains a neglected disease and often *forgotten eliminable cause of blindness*. This situation is further compounded by lack of political commitment in many Member States where prevention of blindness or trachoma is not considered a health priority. The control of blinding trachoma is further disadvantaged by a lack of data and financial constraints.

3. Country presentations

3.1 *Afghanistan*

Dr Ahmad Shah Salam

The National Prevention of Blindness Committee commissioned a trachoma rapid assessment (TRA) in Afghanistan. Its objectives were to optimize resources by using a simplified rapid assessment method for data collection, to identify and prioritize communities for intervention.

The standard TRA methodology was followed and the districts of Bagram, Gozerah, Donal, Dara-i-noor and Markaz were selected for this purpose. The teams consisted of a trained community ophthalmologist, a technician and a volunteer. The TRA was initially piloted in a village near Kabul. The team visited each pre-selected community.

Based on the TRA, two communities were found to be high priority for active trachoma, while seven communities each were found to be medium and low priority. Based on the prioritization of risk factors, seven communities were noted as high priority, while four communities were considered medium priority for environmental improvement.

The TRA has successfully identified and prioritized areas for trachoma control. A door to door survey needs to be carried out in the areas of high and medium priority. TRA needs to be extended to other provinces of Afghanistan. The future plan for Afghanistan is to implement the SAFE strategy in the prioritized areas.

3.2 *Djibouti*

Mr Abdoukarim Ali

Provisional data available for Djibouti suggest that about 10% of the population has trachoma, but no trachoma control programme exists. There is a scarcity of water and a great need for public health education. Further studies are required to substantiate the burden of trachoma and for planning a control programme through the primary health care system with support from partners.

3.3 *Egypt*

Dr Enaam Abdul Hayim

Trachoma is one of the most common diseases in Egypt and is one of the main causes of blindness. It is highly endemic in some areas, although its prevalence has decreased in the past five years due to improvement in socioeconomic status. However, people in the countryside still suffer from trachoma and its complications. The prevalence of the disease varies from around 5% in Mansoura to 32% in Gharbia, with a mean of 7.6% (2004) for the country.

In recent years, Egypt has strengthened its health services and now has a centre for treatment of complications and corneal surgery at the El Zawia Hospital. Furthermore, there are now centres for trachoma prevention at Kafr El Shiekh, Menoufiya and Fayoum where training programmes are run, surveys conducted and free treatment provided. Egypt plans to reduce the prevalence of blinding trachoma by at least 3% over the next three years by:

- optimizing and increasing direct financial support to endemic areas like Ashmon;
- increasing campaigns in endemic areas in collaboration with nongovernmental organizations;
- collaboration with the media;
- widening training programmes to include nine governorates to develop the surgical skills for treatment of complications;
- increasing governmental collaboration in endemic areas for the S and E components of the SAFE strategy;
- providing trachoma charts for follow-up to advanced risk patients;
- supporting and increasing centres for trachoma; and
- mobilizing support from international agencies to collaborate and to intensify efforts.

The generous support and encouragement of Her Excellency Mrs Suzanne Mubarak, First Lady of Egypt, and the continuous guidance and direction of His Excellency the Minister of Health and

Population as well as other partners are vital for the success of the elimination of blinding trachoma in Egypt.

3.4 Islamic Republic of Iran

Dr Ali Reza Delavari

In a survey of causes of blindness, 11 700 eyes were examined. Of these, 543 had low vision, 12 were blind and no trichiasis was found. A TRA was planned for the Islamic Republic of Iran whose goal was to evaluate the situation of trachoma in the provinces of Bushehr, Sistan va Baluchistan, Kerman and Hormozgan. The specific objectives were to: optimize the use of limited resources through a simplified rapid assessment method for the collection of data; identify and prioritize communities for intervention, in particular communities with active trachoma to implement antibiotic distribution, face cleaning and environmental changes and those where trichiasis surgery is required; and to facilitate resources and needs for implementation of the SAFE strategy.

Although there is no formal programme for control of trachoma, all components of face cleaning and environmental change have been integrated in primary health care, and surgery and antibiotic treatment have been incorporated in the referral and payment system in the rural areas.

There exists in the Islamic Republic of Iran a surveillance system for communicable and noncommunicable diseases. An amblyopia prevention programme is run by a national welfare organization and there is a preschool readiness examination for all children who want to go to primary school.

Trichiasis case-finding is conducted through primary health care by maintaining a registry and referring the cases to nearby eye clinics. The Islamic Republic of Iran also wishes to develop a protocol for elimination of blinding trachoma.

3.5 Iraq

Dr Ahmed Salih Rasoul

The situation in Iraq with regard to trachoma is difficult at present. Sporadic cases are seen and it appears that blinding trachoma is not a major public health problem. There is no national programme for control of blinding trachoma. In 1997, a survey revealed a prevalence of 0.64% corneal disease, most of which was caused by trachoma. Hospitals are now seeing some patients with trichiasis and corneal opacity.

In 2004, a national committee for prevention of blindness was formed. There is a school health screening programme. Trichiasis surgery is being done by the ophthalmologists in the hospitals. Further training in lid surgery and corneal transplantation is required. There is a need for health education especially for the doctors who are working in primary health care and also for school children. Tetracycline eye ointment is widely available and is distributed where required. Azithromycin is only available in hospitals.

3.6 Libyan Arab Jamahiriya

Dr Suad Fituri

A TRA was conducted in 2003 and the results were incorporated in the development of a national plan for control of trachoma. This plan was developed as part of the National VISION 2020 Plan. Political support is available for the control of trachoma through the presence of the National Committee for Prevention of Blindness appointed by the Ministry of Health. It is estimated that trachoma accounts for about 5% of all causes of blindness in the Libyan Arab Jamahiriya. Efforts are being made to strengthen the information system as the data available for trachoma are insufficient at present.

3.7 Morocco

Dr Jaouad Hammou

The SAFE strategy is the hallmark of the trachoma control programme in Morocco. The experience in Morocco has been that integrated and comprehensive use of SAFE should be the method of choice for elimination of blinding trachoma.

A case study of five provinces (Errachidia, Figuig, Ouarzazate, Tata and Zagora) was presented where the ultimate intervention goal for trichiasis had been reduced to 1/1000, the prevalence of active trachoma in children under 10 years old was 5% and the antibiotic coverage was more than 80%.

The trachoma control programme started in 1997 and formed a partnership with ITI in 1999. This collaboration helped Morocco achieve its ultimate intervention goals. Data collected from 20 districts showed that the prevalence of follicular trachoma at the community level was 5% in children under 10 years. It was noted that a more than 90% reduction in TF had already been achieved and the final target was in sight for reducing it countrywide to 5%.

Furthermore, clean faces had been achieved in 80% for children under 10 years. One of the main reasons for this achievement was the availability of water and electrification for 80% of Morocco.

The current challenges being faced by the programme include establishing a surveillance system based on door-to-door examination of patients, and the continuation and strengthening of intersectoral cooperation between the Ministry of Health and organizations including WHO, ITI and Helen Keller International that have assisted Morocco to achieve almost total elimination of blinding trachoma.

3.8 Oman

Dr Abdulatif Al Raisi

Oman is at threshold of achieving elimination of blinding trachoma. It has made major achievements in controlling trachoma through integrating primary eye care into primary health care in 1995 and integrating trachoma control into the school health programme since 1991.

A review of the status of trachoma in the country, found that the prevalence of active trachoma in children fell from 37% in 1986–1987 to 0.56% in 2002–2003. Evidence-based information on the SAFE strategy in 2002–2005 was collected using the following parameters: a survey was carried out in children under 5 years in the areas of Dhakhiliya (8 *wilayat*), North Sharqiya (5 *wilayat*) and South Batinah (6 *wilayat*), and TF was found in 0.78% (n = 4205). It was concluded that the ultimate intervention goal for TF had been achieved in all 19 *wilayat*. In the 6 to 12 years age group of school children, 3 *wilayat* (Izki, Rustaq and Ibra) were surveyed and TF was found in 1.6% (n = 8795). In 40 000 primary school children surveyed in 59 *wilayat*, the overall TF rate was found to be 0.56%. The prevalence of TT (2005) in those more than 40 years was found to be 4.14% with males having 3% and females 5.3%.

A very active strategy for face washing has been adopted in Oman. This includes integration of messages of trachoma control in the school health curriculum, a health education campaign in three trachoma endemic *wilayat* and availability of water for washing faces in all schools and villages.

Environmental improvement is essential for sustainability and has been achieved in all urban and rural areas that now have garbage disposal systems and hygienic latrine facilities.

3.9 Pakistan

Professor Asad Aslam Khan

The national committee has constituted several task forces to assist it in the implementation of the national programme of prevention of blindness. These include task forces on trachoma, paediatric ophthalmology, diabetic retinopathy, refractive errors and low vision, cornea, glaucoma, and research. A national population-based survey of blindness and low vision was conducted in 2002–2004 and revealed a prevalence of blindness of 1.05%. This implies that there are about 1.5 million people who are blind. The common causes of blindness were found to be: cataract (53%), scarring of the cornea (14%), glaucoma (7%), refractive errors (3%), macular

degeneration (2%). The Ministry of Health constituted a national trachoma task force under the National Committee for Prevention of Blindness in July 2002.

A national TRA was conducted by the national trachoma task force in 2001–2002 in collaboration with WHO and Sight Savers International (SSI). The TRA was done in 233 villages specifically selected from four provinces of Pakistan using WHO guidelines. The TRA showed the following with regard to prioritization of villages by trichiasis: high priority (29), medium priority (122), low priority (57), and no priority (25).

The national trachoma control programme was started on 21 March 2004 and pilot villages were selected in: Punjab (Sheikhupura district), Sindh (Omerkot district), NWFP (Battagram district) and Balochistan (a door-to-door survey will be started in the year 2006). Participatory rapid appraisal sessions were held and the door-to-door survey was completed in 2004 in all pilot villages in selected districts.

The pilot projects are being supported by: Christoffel-Blindenmission (CBM) for two pilots in NWFP and Sindh; SSI for one pilot in Punjab; and Light for the World (Austria) for one pilot in Balochistan.

Unfortunately on 8 October 2005 a devastating earthquake jolted not only Battagram district but also other northern parts of the country. As a result, many villages and cities were destroyed. The trachoma pilot area was also severely affected and it has been decided that programme activities will be halted until the end of the relief period.

In conclusion, the pilot phase has provided many learning opportunities for the national task force. There is recognition and need for greater community mobilization and a need to strengthen the social components of the programme. Advocacy efforts need to be intensified and improved communications strategies are required for greater public awareness. Trachoma is not yet a priority for public health surveillance. A proactive approach is needed for more public-private and cross-sectoral partnerships.

3.10 Saudi Arabia

Dr Afaf A. BinKhathlan

In 1955–1965, studies in the Eastern province showed a prevalence of trachoma of 100% in Al Hasa, 98.0% in Qatif oasis and 93.0% in Qatif town. The Ministry of Health launched a trachoma eradication programme through primary health care centres and by 1988 the prevalence had reduced to 1.5%. Similar work done by Khalid Tabbara revealed a prevalence of 6.2% of active trachoma in the Saudi population in 1984. By 1994, the prevalence had come down to 1.5% active trachoma among schoolchildren. A review of the SAFE strategy in Saudi Arabia established the following:

- Surgery: 162 electrolysis cases (3 months), 26 lid margin rotation cases (3 months), 20 tarsotomy cases (3 months), and corneal transplant for corneal scars.
- Antibiotics: azithromycin was found to be as effective as a tetracycline ointment 6-week course.
- Facial cleanliness: improved level of education, personal hygiene taught in schools, face washing for prayers and health education pamphlets distributed about trachoma.
- Environmental change: improved housing (stone houses and villas) with improved sanitation and control of flies using window screens, with buildings to include good sanitation and an approved location and control of stagnant rain water. Recently, almost 66 million Saudi riyals were set aside to control stagnant water in the Eastern province.

The future plans for trachoma control in Saudi Arabia include the use of acceptance sampling trachoma rapid assessment to identify any priority areas for trachoma control.

3.11 Somalia

Dr Abdirisak A Dalmar

The prevalence of blindness is estimated to be 1.4% and the main causes of blindness are cataract (55%), glaucoma (25%) and corneal opacity (10%).

A study was conducted to: assess the prevalence and magnitude of active trachoma among primary and intermediate level school children in Mogadishu, describe the baseline characteristics associated with active trachoma and generate a database on the subject in Somalia for future studies.

The study covered all students in 20 schools in Mogadishu. The presence of trachoma was determined by examination using a binocular 2.5× loupe and a focusing torch. Examinations were undertaken and trachoma was graded using the simplified WHO system. Each examiner received training on the identification and grading of trachoma. A series of inter-observer studies were undertaken to ensure that each examiner was grading trachoma correctly.

Field workers examined a total of 10 100 students (63.4% boys and 36.6% girls). Their ages ranged between 6 and 16 years with a mean of 13.2 years (SD = 3.0). There were no late stage signs found. The presence of TF or TI, indicating active trachoma, was found in 6.4% of participants. The prevalence of TF or TI among children aged 6–10 years old was 7.1% and among those aged 11–16 was 5.7%. There was no statistically significant difference in the prevalence of TF or TI among boys and girls.

These findings under state the extent of the trachoma burden, as schools in Mogadishu are privately run institutions. This excludes poor families who are more at risk of developing trachoma. Somalia is a semi-desert country, with scarce availability of water. All these factors create the right conditions for the spread of trachoma infection. In Mogadishu, there are over 200 000 internally displaced persons (IDPs) living in crowded and poor sanitary conditions. The prevalence of blindness in Somalia is estimated to be 1.4% and the

main causes of blindness are cataract (55%), glaucoma (25%) and corneal opacity (10%).

The Ministry of Health has appointed a national trachoma focal person. There is also a National VISION 2020 committee that plans to hold a workshop to formulate the national VISION 2020 action plan. Trachoma will be a component of this plan. There is a great need to do a community survey of trachoma in poor villages and IDP camps to quantify the extent of trachoma infection in the country, and to formulate proper trachoma prevention and control programmes.

3.12 Sudan

Dr Awad Hassan Mohammed Ahmed

Blindness is a main public health problem in Sudan. The Federal Ministry of Health has a long history of trachoma control since 1962 under the national prevention of blindness programme.

At that time, field activities were mainly focused in the northern states according to initial surveys results. Interventions concentrated on intensive health education, antibiotic distribution (tetracycline), promoting proper reuse disposal, sanitation and personal hygiene. It was reported that the programme achieved a marked reduction in trachoma prevalence. In the late 1970s, cataract and vitamin A programmes were added to the prevention of blindness activities.

In the 1990s, AMS&T took over leadership of the programme as contractors for the Federal Ministry of Health. They conducted two trachoma prevalence surveys (2001 and 2003–2004) but the data have not yet been analysed. Azithromycin (Zithromax) distribution took place in some localities from 2001–2004. In April 2005, the Federal Ministry of Health relocated the trachoma control programme within the national prevention of blindness programme.

A national trachoma control programme was immediately established, a national coordinator was appointed and a national trachoma task force formulated. The programme established a policy of decentralization to the states and programme integration into the

primary health care system. The programme is now receiving unprecedented political support at all levels.

The prevalence of blindness is estimated to be 1.5% and the main causes are cataract (60%), trachoma (18%), glaucoma (17%), and others including onchocerciasis (5%). The priority areas (identified by programme managers) are: Khartoum state; Malakal; Renk; Abyei (West Kordofan state); Kassala; Wadi Halfa (Northern state); and Bantiu (Unity state).

These areas were selected according to a population-based survey done in Al Salam IDP camp (west of Omdurman) in April 2005 that showed a 29.3% prevalence of TF/TI in children less than 9 years old, while the prevalence of TT was 0.

After a visit by staff of the Carter Center to Sudan in May 2005, it was agreed to conduct a workshop for the priority states. The objectives of the workshop were to: develop the SAFE strategy to control trachoma; integrate prevention of blindness activities into the strategic plans of state ministries of health; and create and increase awareness, knowledge, attitudes and practice about the national trachoma control programme.

The projected needs for the programme include: 750 000 doses (2005) – 350 000 in IDP camps and 400 000 second and third doses in programme areas; 1 250 000 doses (2006); and 1000 TT surgeries in IDP camps in Khartoum state.

In August–September 2005, reviewers from the Carter Center, and ITI visited Sudan and reviewed the activities and advised on the development of a five-year strategic plan for trachoma control. The objectives of this plan are to:

- complete trachoma mapping in the country by 2010;
- reduce the number of people with TT by 25% by 2010;
- reduce active trachoma in children less than 9 years to less than 15% by 2010 azithromycin distribution;
- increase the percentage of school children less than 9 years with washed faces to 75% by 2010;
- increase the percentage of people who have been educated on the importance of pit latrine use; and

- mobilize multisectoral approaches to access clean drinking-water.

4. Technical presentations

4.1 *Trachoma rapid assessment*

Dr Abdul Hanan Choudhury, WHO EMRO

Trachoma rapid assessment (TRA) is a simple but effective tool that enables data to be collected at a low cost but provides maximum information in minimum time. Information for TRA may be obtained from existing written documents through interviews or group discussions and through direct observations made during field visits and eye examinations performed in selected age groups.

Before conducting a TRA, it must be determine whether more information is required and if so, where it can obtained. The actual TRA involves visiting communities that are at risk of trachoma or are known to have trachoma in order to confirm the existing information. The initial phase includes interviewing key informants such as the provincial directors of health, ophthalmic personnel, social and health service personnel of the United Nations and nongovernmental organizations. At the district level and community levels, the key informants include community leaders (elected officials, religious leaders and teachers), local health workers, local health authorities and traditional healers.

The preliminary process involves using a semi-structured interview, analysis and validation of available information, interpretation of validated data to establish whether a particular area is likely to be endemic (high, medium) or unlikely to be endemic (low). This information would help in establishing whether blinding trachoma is a problem at the country level.

The second phase involves visiting selected villages and using an optimally biased selection targeting those at high risk. At least three to seven villages need to be selected in each district.

A standard methodology for performing a TRA is available that advises on the selection of teams, the assessment of the pattern of

trichiasis in the community, touring the village and observing the environment (housing conditions, solid waste disposal, water supply, road communication etc). It also advises on the examination procedure, and the use of three indicators for ranking and setting priorities of the villages: the number of cases of trichiasis, the rough prevalence estimate of trichiasis and the percentage of active trachoma among children. Other important factors that are assessed include hygiene: unclean faces in children considered if any sign of discharge is present. Environmental factors such as the distance of house to the water source, presence or absence of latrines and evidence of recent use, the evidence of solid waste or garbage, and the presence of animal pens within 20 meters of the house are other important indicators used in the TRA.

The TRA does not provide prevalence of the disease but will indicate the distribution of trachoma in each province/district and will provide a more accurate number of communities requiring active public health interventions according to the different components of the SAFE strategy.

4.2 The contribution of sex and gender to disparities in the burden of trachoma

Dr Paul Courtright, WHO Temporary Adviser

Analysis of the burden of global blindness shows that women are twice as likely to suffer blindness compared with men. Some of the reasons for this disparity include:

- Longer life expectancy in women
- Different risk for acquiring eye diseases
- Higher incidence of cataract among women
- Higher incidence of trichomatous trichiasis among women.
- Unequal utilization of eye care services.

Trachoma needs to be considered a gender health issue because in many (not all) settings, females have higher prevalence of active disease. Women account for 60%–85% of trichiasis cases (2–3 times

more than men) and blindness due to trachoma is about 3 times higher in women compared with men.

In a study on trachomatous trichiasis in Minya governorate, Egypt, women had higher rates compared with men in all age groups above 40 years. Similarly, when trachoma as a cause of vision loss and blindness was studied in Ethiopia, women had higher rates compared with men.

Some of the reasons that make women more prone to trachoma include: women acquire infection from their children; repeated infections through repeated contacts; and women develop trichiasis earlier and more frequently. Furthermore differences in the utilization of surgical services for trichiasis and cost (access to financial resources) may also play a role.

In the implementation of trachoma control programmes, there is a need for gender-sensitive interventions and a strategy focusing on creating a “bridge” between communities and the hospital (to reduce the problems associated with travel, access, need for support, etc.), and community-based promotion (through male leaders, school teachers, radio) to increase awareness and acceptance

In the Region, the main issues include:

- Building a gender focus in national GET 2020 and VISION 2020 plans;
- Expanding gender-sensitive programmes (and policy) throughout the Region;
- Building accountability into monitoring systems (indicators need to be gender-specific).

4.3 How to develop district, regional and national plans for trachoma control

Dr Rajiv Khandekar, WHO Temporary Adviser

For each component of the SAFE strategy information is needed on the magnitude of the problem, the resources available, the training required, the use of eye care services versus a camp approach, advocacy for promoting surgery and use of antibiotics. For each component, identifying barriers and dealing with them, and having a

sound and practical monitoring system in place, is required. A and F can be implemented together through schools as part of child health care and integrated management of childhood illness programmes, community approaches involving mothers, and hand and face washing together.

Additional issues that are vital to consider while planning are political commitment (this may require advocacy to the decision-makers and professionals to include trachoma control as part of other ongoing programmes) involvement of the community, identifying mechanisms for sustaining resources, establishing a health information system that detects, reports and monitors trachoma, and research.

Environmental improvement requires a long term and sustainable initiative that is best achieved through an interministerial approach, collaboration with nongovernmental organizations, and alignment with national strategies for the Millennium Development Goals. It is difficult to monitor and individual targets have to be set for the country.

Elimination of blinding trachoma needs to be viewed under the ultimate intervention goals. More intense efforts may be required to achieve them and to produce community-based evidence of reaching the goals. Every effort should be made to maintain the efficiency of the programme, but it should not be at the cost of other VISION 2020 components.

In the planning and implementation of trachoma control programmes, certain ready-made items already exist, including: TRA manual; distribution of antibiotics mechanism; training materials; health education materials; expertise regionally and globally; TT surgeons accreditation and monitoring; and geographic information system (GIS) applications.

The key to success lies in integrating trachoma control within existing prevention of blindness programmes in the primary health care system, developing effective leadership, generation of resources, using a combination of vertical and horizontal approaches, and in

having a system of accountability to national and international donors and all key stakeholders.

4.4 Human resource development for trachoma control

Dr Paul Courtright, WHO Temporary Adviser

Human resources development is a vital component of any trachoma control programme. Human resources development should be linked to the tasks (and skills) required, within the context of existing personnel, and, if possible, consistent with VISION 2020 planning/implementation needs.

Trichiasis surgery requires: patient case finding/referral; surgery (supervision if by a non-ophthalmologist); follow-up; and management (ordering supplies, managing programmes, etc.). Antibiotic distribution requires skills in distribution, supervision and management (ordering supplies, managing programmes, etc.).

Face washing and environmental improvements are the cornerstone of trachoma control and require skills in community-based health education, mass media and construction of latrines and improvement of water supplies.

Skills needed by trichiasis surgeon (ophthalmologist) include technical skills in high quality surgery, supervision skills for supervising other clinical staff or non-ophthalmologist surgeons and outcome assessment skills for routinely monitoring surgical outcomes. Skills needed by field workers are trichiasis case finding skills, counselling skills, skills in how to follow up surgical cases, skills in distribution of antibiotics and skills in how to carry out health education regarding face washing and use of latrines.

Skills needed by managers relate to ordering supplies for trichiasis surgery, reporting (surgical numbers, surgical outcome, antibiotic coverage, etc.), ordering, stocking, and distributing antibiotics and planning outreach activities.

Matching human resources development needs for trachoma with those for VISION 2020 is important for integration and the key cadres that are likely to be involved include ophthalmologists, ophthalmic nurses (hospital based), ophthalmic assistants (based outside of hospital), managers, optometrists, low vision therapists,

counsellors, maintenance technicians, and most importantly, primary health care providers.

When planning a programme, it is important to do an assessment of human resources to determine the existing health care personnel for eliminating trachoma and whether there is any need to improve the knowledge and skills of health care personnel to achieve the trachoma control goals.

4.5 *International Trachoma Initiative Strategic Plan 2006–2010*

Dr Jacob Kumaresan, ITI

There are an estimated 84 million active cases of trachoma including those in China and India. The International Trachoma Initiative (ITI) supported country programmes cover about 27% of the global burden of disease. These countries include Ethiopia, Ghana, Kenya, Mali, Mauritania, Morocco, Nepal, Niger, Senegal, Sudan, United Republic of Tanzania and Viet Nam. Excluding China and India, there are 36 million active cases of trachoma.

ITI's role in support to national trachoma control programmes has evolved over the last decade. It started in 1999–2004 with an ITI launch and proof of SAFE strategy with country programmes heavily funded by ITI. In 2004–2006, ITI aimed to shift ownership to governments with decreased ITI responsibility for implementation as countries increased financial commitments and programme ownership. In the period 2006–2010, ITI will focus on a broad demonstration of the SAFE strategy with in-country fundraising for programmes. In 2010 and beyond, ITI proposes to operate through a scaleable, sustainable model that maximizes government ownership of programmes and takes advantage of global funding trends.

Over the period of 2006–2010, ITI will seek to move programmes from an 'ownership' model to 'enabler' to 'arm's length' and finally to a 'product fulfilment' model. The global level goals will include advocacy for elimination of trachoma, raising restricted and unrestricted funds for trachoma elimination, and ensuring monitoring and evaluation.

By 2010, ITI hopes to achieve the following:

- 57% of endemic districts in ITI supported countries covered by SAFE
- 42% of endemic districts in existing countries with complete mass interventions
- 4 countries (Ghana, Mauritania, Morocco, Viet Nam) to eliminate blinding trachoma by 2010.

These activities will reduce the global burden of disease by 25%, excluding India and China.

Trachoma has many powerful 'hooks' that can be used to obtain unrestricted funding. These include: poverty, women's rights, sight, behaviour change, Africa, children's health, water and neglected diseases.

In order to eliminate blinding trachoma, there is a need for greater government commitment and ownership in trachoma endemic countries, strengthening of partnerships, community engagement and empowerment, and mobilization of additional resources.

4.6 Integration of trachoma in district and national VISION 2020 plans

Dr Paul Courtright, WHO Temporary Adviser

Planning for VISION 2020 needs a systematic approach and involves:

- National advocacy
- National planning workshops and national plans
- District/regional workshops and creation of district VISION 2020 implementation plans: implementation at district level so planning of comprehensive activities at the same level; develop practical implementation plans for a 2–3 year period; and team approach to planning to create ownership for implementation.

Integration is important because it increases long term sustainability, productivity and effectiveness. It avoids short term effects, duplication, over-bloated structures and unbearable costs.

There are a number of key challenges in integrating trachoma control into district VISION 2020 plans.

- Priority setting, and deciding what criteria can be used for priority setting, is sometimes difficult. It can be achieved by using various criteria such as the percentage of children affected by trachoma, or number of people blind or number of blind years. Sometimes the financial burden of specific eye diseases can also be used as could other criteria. A team approach to priority setting will facilitate essential support.
- Resource identification is an important step and includes human resources needed for trachoma control (from existing personnel), to infrastructure needed for trachoma control (e.g. transportation) to financial resources for trichiasis surgery, antibiotic distribution, and the F and E components of the SAFE strategy (e.g. from basket funds, different partners).
- Combining strategies is also a helpful option as it may not be cost-effective to do case finding for trichiasis in isolation. This can be done by bridging strategies (linking communities with the hospital) and should reach both those with cataract and trichiasis. Another example is antibiotic distribution through health workers (non-eye care) with other tasks or antibiotic distribution through community-directed distributors. The F and E components can also be done through non-eye care workers.
- Interacting with other groups may sometimes result in some hesitancy especially with other (non-eye/non-health) groups for health education and F and E activities. However, there is a potential role of school health education programmes (Ministry of Education) for long-term behaviour change and for water and hygiene agencies outside the health field. Different strategies are needed to engage them in trachoma control.
- Surveys are used for establishing baseline and for monitoring changes, but also present advocacy and capacity building opportunities. Mapping suggests a population based approach to planning and implementation (necessary for all aspects of

VISION 2020). Cataract is likely to be more common than trichiasis and strategies are needed to ensure that cataract is not ignored.

- Monitoring of trachoma control activities need to be integrated in district VISION 2020 monitoring. Donor reporting requirements often vary and this can sometimes lead to confusion. The purpose of monitoring at the district level and national level may be different.
- As blinding trachoma is gradually eliminated as a public health problem in some countries in the Region, necessary strategies will have to be developed for identifying remaining trichiasis cases and ensuring surgery is available, and for surveillance to identify active cases (systems for treating populations).

Integration will lead to better use of the limited resources, better acceptance by populations and long term success of activities.

4.7 Elimination of trachoma in the Eastern Mediterranean Region *Dr Silvio Mariotti, WHO HQ*

Trachoma elimination is a priority for countries of the Region because it is an evident burden on the poorest populations. In many countries such as the Islamic Republic of Iran Lebanon, Morocco, Oman, Saudi Arabia and the United Arab Emirates, the elimination of blinding trachoma is almost complete and it is within reach of some countries such as the Libyan Arab Jamahiriya and Pakistan.

The Region has different models of elimination to offer the world. For instance, in the Islamic Republic of Iran, Lebanon, Oman and United Arab Emirates, the model is one of overall country development; in Morocco, it is full implementation of SAFE; in Pakistan it is through development of a comprehensive district eye care programme.

Elimination of blinding trachoma makes a substantial contribution to MDGs and is a political statement of care for the neglected and often forgotten populations. It could be the next major

achievement in health for WHO as a whole and a breakthrough for the Region.

Trachoma elimination is also a political priority for countries of the Region because the Health Assembly resolution WHA51.11 was passed thanks to the lead of a country from the Region. The Region needs to be a champion in this enterprise, leading the way for other regions to follow. It could provide the evidence, momentum and expertise needed to make blindness from trachoma history. The earliest record of trachomatous blindness is in the Region (the Ebers papyrus) and trachoma control also has its roots in the Region. While financial challenges can make health development a struggle, many countries of the Region are on the verge of elimination and should not lose this important opportunity.

Assessment for certification of having eliminated blinding trachoma is a normative function of WHO. Assessment by WHO is the only independent international assessment of achievement of any public health goal. WHO assessment publicizes the efforts made by the ministry of health and recognizes the role of decision-makers. It has high visibility and public recognition. It is a clear goal which rewards staff after long years of effort and sacrifice, and allows endemic countries to release resources for other chronic disease control backed up by the most renowned public health authority.

The rigorous process of assessment, and requirements for applying to it, helps ministries of health and officers to review the status of the disease and identify whether additional measures are needed to secure achievements and avoid unpleasant surprises a few years later on. 2006 will see the process developed and reported to Member States and relevant partners through the Alliance and the Governing Bodies. Political action is needed to ensure regular reporting to the Executive Body and the Health Assembly about progress in implementing resolution WHA51.11.

Clinical criteria include the following:

- Ultimate intervention goal (UIG) TF: < 5% in children 1–9 years in a community
- UIG TT: < 1/1000 all ages population

- Incident case of corneal opacity < 1/10 000 all ages population per year
- Sustained reduction of risk factors related to personal and community hygiene.

The following country classification is used by WHO:

- Countries A: endemic trachoma, TF > 5%, TT > 1/1000 (in at least one community)
- Countries B: TF < 5%, but TT > 1/1000
- Countries C: no recent history of endemic trachoma (e.g. Europe, Switzerland, United States, etc.)

Where TF < 5% children age 1–9 in the last communities + adequate health services approaches to managing TT cases in the future, these countries would be eligible to apply for a pre-certification phase that would take them off the roster. Final submission of data would be required after 3 years of: sustained prevalence of TF under < 5% children age 1–9 without mass antibiotic intervention and limited family treatment (hygiene); ongoing management of TT through primary health care; trachoma control activities incorporated into the existing health care system (accessibility, quality, efficacy); and adequate surveillance.

In conclusion, the Region has many countries which have or are about to have received certification and have responded to resolution WHA51.11. It is the leading Region in prevention of blindness. Elimination of blinding trachoma is a major global health achievement and needs to be considered as a great advancement in the health of the poorest of the poor. It is a substantial contribution to the MDGs and provides a good testing ground for neglected diseases control (next step). Elimination of blinding trachoma constitutes a major political payback for the engagement of ministries of health and partners and provides regional models of implementation in different scenarios for the benefit of others.

4.8 Research in trachoma

Dr Silvio Mariotti, WHO HQ

The research committee of the International Council of Ophthalmology developed a research agenda for global blindness prevention in 2003. It recommended the following areas for further research:

- Improving surgical outcome of trichiasis surgery. At present, the relapse rate, even for well-trained ophthalmic surgeons, is high.
- Elucidating the role of acute/recurrent/chronic infection in the pathogenesis of conjunctival scarring.
- Documenting the dynamics of infection/reinfection (e.g. what serves as the reservoir of *C. trachomatis* following mass antibiotic treatment; how is it reintroduced into a community; how does it spread between individuals?)
- Determining what is required to sustain the reduction in prevalence of infection and active disease following antibiotic treatment (and thereby block development of blinding trachoma?)
- Documenting how SAFE can be most effectively delivered.

The ITI/WHO joint Research Agenda Meeting for Trachoma was held in 2004 and added the following research priorities, ranked in priority from A (highest) to C.

S Component

Intervention to reduce surgery failure rate (surgical failure/recurrence)

- Surgical (A)
 - Standardized training/certification of surgeons
 - Re-assessment of surgeons
- Disease process
 - RCT on surgery + azithromycin (C)
 - Pathogenesis of corneal damage (C)

- Pathogenesis of fibrosis (histological analysis of tarsal samples) (B)
- Long term impact on visual function (A initiate)
- Surgical uptake
 - Refusal management (incentives, quality, etc.) (A)
 - Refusal trial (no treatment versus alternatives) (B)
- Indication for surgery (when to do surgery) (C)

A, E and F components

- Frequency of treatment (1 versus. 2/year) in hyperendemic areas; value of surveillance approaches (A)
- Target population (all versus child + mother) (A)
- Importance of coverage (A)
- Importance of timing of treatment (A)
- When to stop distribution (A)
- Social anthropological studies for effective behavioural change (clean faces / latrines use / water utilization) (A)
- Impact of health education in schools on reduction of trachoma
- Socioeconomic development factors eliminating trachoma (historical study) (C)
- Sub-urban setting: is there blinding trachoma? (C)

Others

- Synergy of trachoma control with other community based disease control / elimination programmes (A)
- ASTRA + CSAS: finalize and test as soon as possible (A)
 - Prevalence categories in communities
 - Prevalence rate in wider areas
 - Identification of clusters of hyperendemic communities in hypoendemic areas
- Verification
 - Relationship of TF with CT infection (A)
 - Time-span of stable reduction
 - No new incidence of TT (A)
 - Evidence for $TT < 1/1000$

- Surveillance data / registry
- TT assessment in RACSS surveys
- PHC reports
- Socio-economic benefits of blinding trachoma elimination (B)
- Develop model on impact of implementing SAFE on reduction of blinding trachoma (C)

4.9 *Health mapping for trachoma*

Mr Hani Farouk, WHO EMRO

Public health mapping and geographic information systems (GIS) are new tools that are available for public health planning and intervention, monitoring and surveillance. Health mapping and GIS allow integrated approaches to data management, provide a powerful visual decision-making support tool and are a platform for sharing of data. The goal of public health mapping is to strengthen infectious diseases surveillance and response at global and local levels.

Public health mapping and GIS technology have been successfully used for trachoma, guinea-worm infection, monitoring drug distribution in onchocerciasis, polio, lymphatic filariasis, hepatitis, water sources, education levels, demography patterns, anaemia, etc.

Public health mapping requires a geographical profile for each country and a defined set of variables and indicators. The core geographic data include:

- Digital boundary maps (national to district)
- Village/town locations
- Population (down to district and village level)
- Health infrastructure (location, type)
- Environmental features (elevation, land use)
- Social services (safe water, schools etc)
- Socioeconomic data
- Intervention areas/activities of partners (United Nations agencies, nongovernmental organizations etc).

Other information required includes population subgroups, administrative level, data sources and periodicity. It may be used to respond to queries for different purposes like advocacy, monitoring, surveillance strengthening, identifying populations at risk, planning and targeting of resources, management and information dissemination.

5. Group work

The participants were divided into three groups. In addition to country representatives, each group had WHO and IAPB facilitators, international resource persons, representatives of nongovernmental organizations and observers.

The groups discussed three topics:

- What steps do we need to take to initiate a national trachoma control programme and how are we going to do it? The groups were recommended to look at the following areas: stakeholders; data; situation analysis; advocacy; targets; strategies; mapping/TRA and identifying opportunities.
- What are the key things we need to do to plan for a trachoma control programme and how are we going to do it? The groups were given the following suggestions to reflect on: objectives and targets (SMART); focus on priority districts (from mapping); planning for SAFE; management; coordination through a task force; technology; supplies and distribution; human resources development; budgeting and resource mobilization and advocacy and communication.
- What are the essential elements required to implement a trachoma control programme and how are we going to do it? The groups were given the following suggestions for consideration: tool kit; integration into general health care; coordination and collaboration; team building; pilot areas; community mobilization; advocacy; roll out from pilot areas and reporting.

The main objectives of the group exercises were to discuss the planning and implementation of a trachoma control programme and to seek the input of the groups to develop regional strategies and recommendations for implementation of control of blinding trachoma within the Region. All groups were encouraged to discuss cross-cutting themes such as advocacy, coordination and linkages. A standard template with questions to aid discussion was given to each group to be used for the group exercise and presentation. Each group presented their recommendations, which formed the basis of the recommendations of the meeting.

Group A report: What are the key things we need to do to plan for a trachoma control programme and how are we going to do it?

Introduction

- All of the countries in this group (Islamic Republic of Iran, Libyan Arab Jamahiriya, Morocco, Oman and Saudi Arabia) have active intervention programmes
- The steps to be taken to start intervention programmes might not be applicable to all countries

Stakeholders

- Ministry of Health
- Ophthalmic professionals
- Ministry of Education
- Ministry of Municipal Affairs
- Ministry of Finance
- Ministry of Planning (GIS)
- Training institutes
- Other governmental health service providers
- Private sector
- National charity committees
- Ministry of Social Affairs

Data

- Registry forms for TT (person) in surgical institutes
- Amblyopia screening programme, an opportunity for the TF reporting (3–4 years)
- 1–5 years at the PHCC coming for vaccination for active trachoma
- 6–7 years children at the preschool health exam
- Prevalence study in endemic areas in each country

Situation analysis for trachoma

- Islamic Republic of Iran 2004
- Morocco 2005
- Oman 2005

Strategies

- TT surgery as a prerequisite for cataract surgery
- Looking for a technique to stop the new TT development
- Mapping system (Oman and Morocco)
- Mass vaccination campaigns
- Inclusion of electrolysis as a management tool for TT
- Preschool children 6–7 years evaluation

Advocacy

- The decision-makers
- Colleagues. (ophthalmologists, residents, primary health physicians)
- PHCC health educators training to include lecture concerning eye care
- Media for public education about the situation

Targets

- Saudi Arabia and Libyan Arab Jamahiriya did not set their own ultimate intervention targets
- Proper reporting of unmanaged TT
- Acceptance rate for surgical correction

- Consider modalities for surgical correction to reduce the recurrence and over corrections
- Proper reporting of new active trachoma through primary health care and school health care centres

Group B Report: What are the key things we need to do to plan for a trachoma control programme, and how are we going to do it?

1) Conduct a situation analysis (national and state level)

- Engage anticipated long-term players
- Consideration of available data
 - Trachoma prevalence data (TF and TT)
 - Geographic distribution of existing sanitation implementation
 - Geographic distribution of water availability
- Existing and potential capacity within the health service for the programme
 - Who is available to train village volunteers?
 - Who will coordinate awareness raising and health education?
 - Who is available to be trained to do the surgery?
 - Who is going to implement azithromycin distribution?
 - Where are drugs and programme materials going to be stored?
- Identify potential partners
 - Look for linkages with strong nongovernmental organizations, existing health programmes, IDP infrastructures
 - Media availability
- Conduct advocacy with those partners
- Analyse demographic and physical factors
 - Weather and seasons
 - Population density
 - Existing health infrastructure
 - Water availability

- Analyse social sectors/anthropology
 - Local beliefs about trachoma and eye disease
 - Likely barriers to surgical uptake
 - Seasonal habits, migration, work patterns
 - Where do people get together, how can they be reached for health education
- 2) Set up the national task force**
- Ensure 'buy-in'
- 3) Select priority states/districts according to:**
- Estimated burden of disease
 - High expectation of success
 - areas that are already doing well
 - high EPI coverage and low maternal mortality
 - collaborative leadership
 - presence of some focus on MDGs
 - feasible access for supervision
 - availability of local partners
 - Representative of larger areas to facilitate scaling-up
- 4) Request state level plans following guidelines from the national task force**
- Be clear about what resources are available and what are required at the state level (clarify expectations)
 - Avoid prescribing a programme
 - Provide as much technical assistance as is required depending on the existing capacity
 - Start with a technical workshop, or multiple workshops
 - It is likely that there will be a greater than expected need for technical assistance
 - Select programme components to be sensitive to the human and environmental conditions found in the priority areas
 - Let the state programme make the final decision to ensure ownership of the plan

5) Formulate a five year strategic plan

- Ensure clarity and conviction in the plan
 - Include clear plans for each of the S, A, F and E components
 - List all activities that will be needed to achieve the plan
 - List all partners and their roles and responsibilities
 - Develop a justified budget that is consistent with the plans
 - Present a clear system for reporting progress against the objectives
- Aim at a plan that is reasonable and realistic and that will give confidence to both implementers and donors.

6) Collect baseline data

- Epidemiologically sound population-based surveys
 - Trachoma (TF in children aged 1–9, TT in adults)
 - Clean face in children aged 1–9 years
- Household latrine ownership
- Access to water
- Access and use of mass media, or how to reach the target population with health education

7) Do it

Group C Report: What are the essential elements required to implement a trachoma control programme and how are we going to do it?

Essential elements

- NTTF (National Trachoma Task Force)
 - Part of VISION 2020
 - Members from environmental, water and sanitation and education departments
- Data assessed from situation analysis and prevalence surveys
- Targets for the areas of intervention

- Funds and budgeting
 - ministries of health
 - international nongovernmental organizations
 - WHO
 - local nongovernmental organizations
 - other sources
- Identification of services available related to SAFE, e.g. hygiene and water and sanitation agencies.
- Advocacy: authorities, partners and community leaders
- Ownership/commitment by the authorities: coordination (NTTF), budget and coverage of local expenses
- Communication plans
- Supplies (surgical kits and antibiotics)
- Trained team for AB distribution
- Trained human resources for trichiasis surgery
- Standards for quality of surgery and certification of surgical skills

Implementation

- 3–5 year plan for EBT
- Implementation plan for the first year
- Limited number of districts in the first year (number depends upon the capacity)
- Review of the implementation plan at the end of the year
- Replication of the plan to the rest of the country

Steps for implementation of different components of SAFE

- Workshops for micro planning
- Team training and proforma testing
- Participatory rapid appraisal (PRA) sessions
- Door to door survey

S component

- Approval of TT surgical kit
- Training of master trainer

- TT surgery

A component

- Quotation for drug
- Selection of manufacturer / product
- Drug purchase
- Sensitization of DHO / key person for drug distribution
- Drug treatment / acknowledgment
- Drug management

F and E components

- Involvement of public health department
- Development of health education material
- PRA exercise (health education)
- Identification of community-based and nongovernmental organizations for collaboration in other sectors
 - training of masons
 - latrine construction
 - solid waste/control of fly breeding sites

Monitoring of the programme

- Formulation of indicators by the NTTF for monitoring implementation of the SAFE strategy
- Reporting to VISION 2020

6. Recommendations

1. Based on the information available on the burden of blinding trachoma, Afghanistan, Djibouti, Egypt, Somalia, Sudan and Yemen should be considered priority countries for trachoma control in the Region. In particular, Egypt and Sudan, having the highest prevalence of blinding trachoma, should give priority to accelerating trachoma control activities within national VISION 2020 plans.

2. Countries should secure the inclusion of trachoma elimination in national VISION 2020 plans and collect evidence on the national trachoma situation to report to the Health Assembly.
3. Recognizing that trachoma is a disease of poverty with implications for the Millennium Development Goals, countries should integrate trachoma control initiatives into ongoing development work and poverty reduction strategies, and include trachoma control in collaborative plans with partners.
4. In recognition of the vital role of primary health care in the control of trachoma at community level, efforts should be intensified to promote implementation of the SAFE strategy as an integrated component of primary health care.
5. Member States with endemic trachoma should develop an evidence base for planning trachoma control using the standard methodology of population-based studies where possible, or alternative methods for prioritizing interventions such as Trachoma Rapid Assessment (TRA).
6. Member States aiming to achieve elimination of blinding trachoma should ensure that there is a surveillance mechanism in place to monitor potential resurgence of the disease.
7. In planning for trachoma control, national programmes should adopt a basic unit for intervention at district level for a population ranging from 100 000 to 500 000 and develop strategies that derive additional impetus from decentralization processes.
8. Countries should establish a national trachoma task force aimed at developing greater public-private partnerships and cross-sectoral collaboration among stakeholders from the fields of

health, environment, water and sanitation in order to address the social determinants of trachoma.

9. National control programmes for trachoma should be supported to ensure that personnel have adequate skills to plan, implement and monitor all aspects of the SAFE strategy and are provided with the equipment necessary to fulfil their mandate.
10. Capacity should be strengthened among ophthalmologists and programme managers involved in national trachoma control programmes in the areas of public health, health care management, communications and advocacy.
11. National VISION 2020 plans should include awareness-raising and mobilization of support for trachoma control as part of their advocacy and communications activities.
12. The research areas prioritized by the global trachoma research group should be taken up in countries of the Region with support from WHO as appropriate.
13. A follow-up meeting should be held in 2008 to maintain the momentum and to monitor progress.
14. The Regional Office should ensure the translation of key WHO trachoma resource documents into Arabic.

*Annex 1
Agenda*

1. Registration
2. Opening session
3. Introduction of participants
4. Election of officers: Chairman, Co-Chairman, Rapporteurs, administrative announcements
5. Adoption of agenda
6. Review of the current situation of blinding trachoma in Member States and activities for elimination of blinding trachoma under the global initiatives of GET 2020 of VISION 2020
7. Review of the progress made and constraints faced by some Member States (based on country reports and data collection)
8. Scaling up and enhancement of the implementation of SAFE strategy
9. Discuss the establishment of a technical cooperation between Member States in the field of elimination of blinding trachoma based on the regional experiences
10. Plan the formation of a partnership to ensure intersectoral collaboration, including all parties interested in the elimination of blinding trachoma
11. Outlining a document stating the priority areas of action to eliminate blinding trachoma
12. Closing session

Annex 2
Programme

Monday, 28 November 2005

- 09:30–10:30 Registration
- 10:30–11:45 Opening session
Address by Dr Hussein A. Gezairy, Regional Director, WHO/EMRO
Address by H.R.H. Prince Abdulaziz Bin Ahmed Bin Abul Aziz Al Saud, Regional Chair, IAPB
Address by H.E. Dr Tabitta Botros, Federal Minister of Health, Sudan
Address by H.E. Dr Mohamed Awad Afifi Tag El-Din, Minister of Health and Population, Egypt
Group photograph
- 12:30–14:30 Plenary session
Introduction of participants
Election of officers (Chair, Co-Chair and Rapporteur)
Scope, purpose and outcome of the Regional Planning Workshop for the Elimination of Blinding Trachoma, , Dr Ahmad Mohit, WHO/EMRO
Burden of trachoma in Eastern Mediterranean Region and SAFE strategy, Dr A. Choudhury, MO/CPB, WHO/EMRO
- 13:15–17:15 Country presentations: Afghanistan, Djibouti, Egypt, Islamic Republic of Iran, Iraq, Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Saudi Arabia, Somalia, Sudan, Yemen

Tuesday, 29 November 2005

- 08:30–08:45 Rapid assessment of trachoma, Dr A. Choudhury, WHO/EMRO
- 08:45–09:00 How to develop a plan for trachoma at district, regional and national levels, Dr Rajiv Khandakar, WHO Temporary Adviser

- 09: 00–09:10 Human resources development for trachoma, Dr Paul Courtright, WHO Temporary Adviser
- 09:10–09:20 Ultimate Intervention Goals of the SAFE strategy for trachoma, Dr Rajiv Khandakar, WHO Temporary Adviser
- 09:20–09:30 Cooperation Strategy for the Elimination of Trachoma 2006-2010, Dr J. Kumaresan, International Trachoma Initiative
- 09:30–11:00 Group work (Session 1) What steps do we need to take to initiate a national trachoma control programme and how are we going to do it?
- 11:30–12:00 Report back by Group A with input by other groups
- 12:00–13:00 NGO presentations 1
- 14:00–15:30 Group work (Session 2) What are the key things we need to do to plan for a trachoma control programme and how are we going to do it?
- 15:30–16:15 Report back by Group B with input by other groups
- 16:15–17:15 NGO presentations 2

Wednesday, 30 November 2005

- 08:30–08:40 Research in trachoma, Dr S. Mariotti, WHO/HQ
- 08:40–08:50 Integration of trachoma in district and national Vision 2020 plans, Dr Paul Courtright, WHO Temporary Adviser
- 08: 50–09:00 Elimination criteria and rationale for elimination of trachoma in the Region, Dr S. Mariotti, WHO/HQ
- 09:00–10:30 Group work (Session 3) What are the essential elements required to implement a trachoma control programme and how are we going to do it?
- 11:00–11:30 Report back by Group C with input by other groups
- 11:30–11:40 Health mapping for trachoma, Mr Hani Farouk, WHO/EMRO
- 11:40–12:30 Discussion
- 12:30–13:30 Conclusions and recommendations, Dr A. Choudhury, MO/CPB, WHO/EMRO

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 Mrs Marianne Orfali, Senior Administrative Clerk, WHO/EMRO
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*Annex 4**Message from Dr Hussein A. Gezairy, WHO Regional Director
for the Eastern Mediterranean*

It gives me great pleasure to welcome you to the Regional Planning Workshop for the Elimination of Blinding Trachoma, organized by the WHO Regional Office for the Eastern Mediterranean in collaboration with the Global Alliance for Elimination of Blinding Trachoma and the Eastern Mediterranean Regional Office of the International Agency for Prevention of Blindness.

Trachoma is one of the oldest infectious diseases and a preventable cause of blindness. Blinding trachoma remains a public health problem in many countries in the world including Member States of the Eastern Mediterranean Region. Based on current information, WHO estimates that, globally, around 84 million people suffer from active trachoma, most of whom are children, 7.6 million suffer from trichiasis, 3 million are visually impaired and around 1.4 million are blind due to complications of trachoma. In the Eastern Mediterranean Region around 10 million suffer from active trachoma and around 80 million people living in endemic areas are in need of treatment from trachoma or its complications. Also, 2 million suffer from trichiasis, and may go blind if the trichiasis is not corrected by surgery. Trachoma is now found in pockets in Afghanistan, Djibouti, Egypt, Islamic Republic of Iran, Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Saudi Arabia, Sudan, Somalia and Yemen.

As you know many countries in the Region suffer from the effects of long civil conflict, complex emergencies and natural disasters, both ongoing and recent. This has resulted in destruction of health care infrastructures, especially in Afghanistan, Somalia, Sudan and most recently Pakistan. Sudan, where the trachoma control programme is one of the oldest programmes to have suffered from the long civil war, currently has the highest burden in our Region. Recent surveys show that in Malakal, Sudan around 40% of women

above 30 years of age suffer from trichiasis and, unless action is taken, will go blind. In Egypt the disease remains endemic in the governorates of Menoufia and El Minya, and active trachoma is found in around 40% of the children. WHO-supported rapid assessment, in Afghanistan, Islamic Republic of Iran, Pakistan and Yemen, has also indicated areas needing intervention.

The improvement of socioeconomic conditions has decreased the prevalence of trachoma in many countries in this Region. I am pleased to note that many Member States have taken necessary steps to adopt the SAFE strategy, which focuses on Surgery, Antibiotics, Facial cleanliness and Environmental change. Great possibilities to eliminate this problem have already been demonstrated in Morocco and Oman where a national trachoma elimination programme recently brought together trachoma experts from all over the world and Morocco has announced a target date for elimination of blinding trachoma by 2005. In the Islamic Republic of Iran and Saudi Arabia, the prevalence of active trachoma has been reduced and efforts are now under way to eliminate blinding trachoma. The Regional Office for the Eastern Mediterranean will provide necessary technical support to Member States and coordinate with other organizations to achieve the goal of global elimination of blinding trachoma in this Region by 2020.

In 1996 WHO along with interested partners from the Global Alliance for Elimination of Blinding Trachoma launched the GET 2020 initiative, and subsequently in 1999 the global initiative of Vision 2020 was launched to reduce avoidable causes of blindness, with trachoma identified as a priority disease. Every year the Global Alliance for Elimination of Blinding Trachoma meets to evaluate the progress made and recently held its ninth alliance meeting in Geneva, the report of which is available.

As we all know, trachoma is a disease closely linked to poverty. Elimination of trachoma is therefore not easy unless we address some of the root causes of poverty itself, and work together by linking the process at the national and regional development levels. In many of the countries of the Region trachoma is not a priority, but by

alleviating poverty and linking trachoma to the Millennium Development Goals (MDGs) we can easily advance the process of blinding trachoma elimination. I hope the governments of endemic countries will take necessary steps by developing the national plan for trachoma elimination and allocating necessary resources for the implementation of the SAFE strategy. Implementation of all the components of the SAFE strategy requires involvement and coordinated efforts from the Ministries of Health, Environment, Water and Sanitation and Education, together with the communities concerned, nongovernmental organizations and international organizations.

Elimination of blinding trachoma is a priority for the Eastern Mediterranean Region under the WHO Alliance for the Global Elimination of Trachoma (GET 2020). I hope in the coming days all experts present here today will share their knowledge and will come forward with the practical steps necessary for Member States to develop an action plan for the elimination of blinding trachoma.

I would like thank all of you for your participation in this workshop, and particularly IAPB, IMPACT/EMR, UNICEF, AGFUND, The Carter Center, the International Trachoma Initiative (ITI), Christoffel-Blindenmission (CBM), Sightsavers International, Al Noor Foundation, Al Bassar International Foundation, PICO and Al-Shifa Trust for your support in our joint effort for the elimination of blinding trachoma in the Eastern Mediterranean Region.

Allow me also to thank HRH Prince Abdulaziz Bin Ahmed Al-Saud and their Excellencies, the Ministers of Health for their kind support, and assure you of our continued cooperation. I wish all success to this meeting.

God bless you all.

