

# **Implementation of VISION 2020 in the Eastern Mediterranean Region**

*Report on a regional planning workshop*

Cairo, Egypt, 14–17 December 2003

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## **1. Introduction**

Blindness remains one of the major public health problems in the Eastern Mediterranean Region. Available data indicate that an estimated 6.3 million blind people and around 22 million visually impaired people live in the Region and that cataract remains the major cause (60%) of visual impairment. Blindness and visual impairment have a profound social and economic impact on daily life and affect families, societies and entire countries. The cost of productivity, rehabilitation and education of the blind is a significant economic burden particularly in many developing countries. In addition, blindness is often associated with lower life expectancy. Moreover, unless urgent action is taken, this burden is expected to double within the next 20 years. In order to reduce avoidable blindness, in 1999 WHO and the International Agency for Prevention of Blindness (IAPB), launched the global initiative VISION 2020 "Right to Sight". The WHO Regional Office for the Eastern Mediterranean launched initiative at regional level in 1999; following that, many countries of the Region launched national initiatives.

In order to enhance the current prevention of blindness activities in the WHO Eastern Mediterranean Region, a VISION 2020 regional planning workshop was held at the WHO Regional Office for the Eastern Mediterranean in Cairo, Egypt, from 14 to 17 December 2003. Programme managers from Afghanistan, Bahrain, Djibouti, Egypt, Islamic Republic of Iran, Jordan, Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Somalia, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen attended the meeting, along with representatives from regional and international nongovernmental organizations and WHO collaborating centres (the list of participants is included in Annex 1.)

Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean, opened the meeting and stressed the importance of blindness prevention activities in the Eastern Mediterranean Region, noting that 80% of the cases of blindness and visual disability in the Region were avoidable. Most of the blindness problems existed in

countries that were characterized mainly by a large population, low income and relatively weak infrastructure of health care. In addition, some countries continued to suffer from the consequences of war and civil strife. In order to enhance and strengthen the current prevention of blindness activities in the Region, the Regional Office had organized the regional planning workshop. During the workshop, it was expected that participants would share their experiences and come up with recommendations to reduce the blind population in the Region. The Regional Director urged Member States to commit themselves to supporting the initiative by setting up a national VISION 2020 plan in partnership with WHO and in collaboration with nongovernmental organizations and the private sector, and to mobilize additional resources for eliminating avoidable blindness.

Dr Gezairy thanked the participating nongovernmental organizations and collaborating centres for their active participation in the workshop and expressed the hope that they would form a regional coordination group to support the initiative effectively. In this respect he mentioned the support of IMPACT/EMR, Al Noor Foundation, Al Bassar International Foundation, Nadi Al Bassar, Lions Clubs International Foundation, Christian Blind Mission, Sight Savers International, International Trachoma Initiative, Fred Hollows Foundation, The Carter Center, King Khaled Eye Specialist Hospital, Al Shifa Trust, Layton Rahmatulla Benevolent Trust, Al Israh Foundation, Pakistan Institute of Community Ophthalmology and other organizations that were working together in partnership with WHO in the countries of the Region.

During his address, His Royal Highness Prince Abdulaziz Bin Ahmed Bin Abdulaziz Al Saud, Regional Chairman, IAPB, stressed the importance of VISION 2020 and its implementation in countries of the Region. He noted that national VISION 2020 committees had been constituted in most of the countries of the Region, and their representatives were attending this important occasion in order to exchange experiences and opinions on challenges faced in control of blindness. Many of the countries in the Region lacked accurate statistics concerning the prevalence and distribution of blindness and its causes, which was further compounded by paucity of human,

technical and financial resources to undertake programmes for control of blindness. He emphasized the importance of technical cooperation between countries of the Region to maximize the use of available resources. The IAPB Regional Office would assist in gathering all necessary information from national committees about blindness control programmes and in the coordination of such efforts in different countries. He suggested that countries reconvene in 2005 as a follow-up to the meeting to discuss what each country had accomplished, the difficulties still faced and how these could be overcome and to ensure that each country had developed a plan of action based on actual statistics and facts about blindness in the Region.

Dr Nasr El Sayed, Under Secretary for Health, Egypt, delivered a message from H.E. Dr Mohamed Awad Tag-El-Din, Minister of Health and Population, Egypt, in which he encouraged countries of the Region to take action to reduce the prevalence of blindness as a major public health problem under VISION 2020. Describing the situation of blindness in Egypt, he noted that trachoma, in particular, was a preventable cause of blindness which existed in some pockets in Egypt, and that Egypt had taken a multisectoral approach to addressing the problem along with the support of International Trachoma Initiative and Al Noor Foundation. One of the challenges facing the Ministry was the need for more training among primary health care physicians on early detection and treatment of trachoma cases. He also stressed the need for better coordination with all organizations, including nongovernmental organizations and the private sector, for implementation of the prevention of blindness programme.

Dr Mohamed A. Jama, Deputy Regional Director, WHO/EMRO, gave a brief introduction about the scope, purpose, objective and expected outcome of the workshop. It was expected that over the course of the meeting the participants would come out with recommendations leading to a regional strategy aimed at reducing blindness in the Region under the global initiative of VISION 2020.

Expected outcomes of the workshop included a regional strategy for VISION 2020 based on situation analysis of eye health

problems and priorities among countries; a framework for a national plan of action based on the regional strategy that could be used by the member countries; and a regional coordination group for IAPB and nongovernmental organizations.

Dr Ahmad Mohit, Director, Health Protection and Promotion, gave a brief overview of the activities carried out by the Control and Prevention of Blindness technical unit during the past two years to assist countries in building their national capacity to deliver interventions through strengthened eye health delivery systems, based on the primary health care approach.

Official delegates from Egypt, Iraq and Palestine signed a declaration of support for VISION 2020 along with representatives of WHO and IAPB.

Dr Mohammed Daud Khan and Dr Adel Rushood were elected as Chairman and Co-Chairman, respectively. Dr Haroon Awan and Dr Rajiv Khandekar served as Rapporteurs. The workshop agenda, programme and list of participants are given in Annexes 1, 2 and 3, respectively. The resolution on elimination of avoidable blindness (WHA56.26) adopted by the Fifty-Sixth World Health Assembly is attached as Annex 4. A summary of the group work is included as Annex 5.

## **2. Global and regional situation of prevention of blindness**

### **2.1 *Global situation***

Today, there are around 180 million people worldwide with visual disability, in need of social, vocational, economic or rehabilitative support services. Around 45 million people are blind and cannot walk unaided. Every year an additional 1–2 million people go blind. Cataract is responsible for over half of the blindness, followed by trachoma, childhood blindness, uncorrected refractive errors, diabetic retinopathy, glaucoma and onchocerciasis. Over 80% of blindness is avoidable and unfortunately over 90% of blind people live in developing countries. Without proper intervention, this figure



could double over the next 25 years. Many reasons have been identified for the rising tide of blindness, prominent among them being the increase of the elderly population, the low output from existing services, and the inadequacy of resources. These are compounded by the lack of information on the magnitude of the problem and on the cost effectiveness of available interventions.

In 1993, WHO and the World Bank collaborated in an effort to measure the burden of blindness as part of the global burden of disease, including some of the causes of blindness and visual impairment. The information available in the WHO Global Data Bank on Blindness at that time was used as a basis for these calculations. This was the first time that more reliable population data were available to calculate the global burden of eye diseases and visual loss. It also used the concept of the disability-adjusted life year (DALY) in estimating the burden of disease and disability. It revealed that interventions against blinding diseases were significantly cost effective in terms of DALYs gained. These findings show that blindness and visual impairment deserves priority attention in public health.

In order to reduce avoidable blindness, WHO, along with the International Agency for Prevention of Blindness (IAPB), launched the global initiative VISION 2020 "Right to Sight" in February 1999 in Geneva. This initiative, to help eliminate avoidable blindness by the year 2020, was jointly launched by WHO together with more than 20 international nongovernmental organizations involved in eye care and prevention of blindness. The launch was both imperative and timely. It followed the results of further studies that highlighted the increasing burden of not only blindness, but particularly avoidable (preventable and curable) blindness and visual impairment. The objective of this initiative over the next 20 years is to take steps to prevent an estimated 100 million people, mainly in the developing world, from becoming blind, as well as to save an estimated US\$ 102 billion in lost productivity over the next 20 years. VISION 2020 focuses on creating adequate eye care facilities by a foundation of trained eye care workers, implementing programmes to control the

major cause of blindness and integrating eye care into the general health system.

Unfortunately, political commitment for such a worthy cause has not been generally forthcoming due to competing demands on limited government resources. However, there is an argument which suggests that if the global burden of blindness were given higher priority, it would release much-needed funds.

One prerequisite for this is the government's own commitment, at the highest level, which has often been lacking. The increasing evidence and recognition of the magnitude of the problem, its implications on poverty and deprivation and its impact on development, should spur governments to address this challenge. It is not only a health imperative; it is also a moral and socioeconomic imperative. Over the past decade, there have been reports of gender inequity in eye care services. Reportedly, there is a disproportionate burden of unnecessary blindness in women. VISION 2020 will strive to achieve gender equity in the provision of quality services.

The resolution on elimination of avoidable blindness adopted by the Fifty-sixth World Health Assembly in May 2003 (see Annex 4) is a key development. If it is to succeed, there must be enhanced bilateral cooperation and support, efficient implementation, monitoring, evaluation and operational research. These strategies may be further strengthened by creation of structures such as regional coordination groups that would assist in identifying regional priorities, suggest strategic options and mobilize resources for eye care development.

## **2.2 Regional situation**

In 2002, the Eastern Mediterranean Region had an estimated population of 492 million. An estimated 6.3 million people in the Region are blind in both eyes (13.5% of the global blind population), including about 200 000 blind children and 22 million people suffering from visual disability. Over 60% of blind people in the Region are found in Afghanistan, Islamic Republic of Iran, Iraq and Pakistan, which together have a mean prevalence rate of blindness of 1.46% against a regional mean of 1.3%. Many countries of the Region

suffer from long civil conflict, relatively poor health care infrastructure and a relatively high burden of blindness.

The main causes of blindness in the Region are cataract (which remains the most common avoidable cause of blindness of all causes), refractive errors, corneal opacity, diabetic retinopathy and glaucoma (Table 1). Intraocular lens implantation rates vary from 64% in the North African belt to 97% in the GCC countries, with a regional average of 78%. Many countries have a high number of cataract backlog.

Trachoma remains an endemic disease and is found in pockets in Afghanistan, Djibouti, Egypt, Islamic Republic of Iran, Morocco, Oman, Pakistan, Saudi Arabia, Sudan and Yemen. Recent studies suggest that there has been substantial progress towards the elimination of trachoma from Oman, Morocco and Saudi Arabia in the past few years. In Pakistan, a national rapid assessment of trachoma was done in 2001–2002 that identified high priority areas in the northern areas and parts of Sindh province, with medium priority areas in all the four provinces. Similarly, endemic trachoma has been found in Egypt, Sudan and Yemen.

About one seventh of the world's blind children are estimated to be in the Eastern Mediterranean Region. The rates of childhood blindness are high in Afghanistan and Somalia (12–15 per 10 000 children). Pakistan, Sudan and Yemen have childhood blindness rates of 10–12 per 10 000 children. Common causes of blindness in children in the Region include retinal dystrophies, congenital cataract, whole globe problems (e.g. microphthalmos) and corneal scarring due to vitamin A deficiency. Hereditary factors account for more than 50% of all causes. Refractive errors have a high prevalence in the Region. The prevalence in schoolchildren ranges from 25% in Jordan to 4.3% in Pakistan. The number of people affected with presbyopia is believed to be very high, but accurate estimates are not available.

The estimated number of people suffering from low vision is about 22 million. However, those in need of low vision care are about 6 million as the majority of the 22 million suffer from cataract or refractive errors that are treatable. Unfortunately, low vision care is generally poorly developed within the Region. However, significant

strides have been made in Pakistan, where 10 tertiary level low vision clinics have been established as part of the national low vision programme within the national VISION 2020 plan. In addition, Pakistan has developed training programmes for refractionists and produced its own low vision devices and assessment materials. In many countries of the Region, glaucoma and diabetic retinopathy are emerging causes of blindness.

Human resource development for eye care is a major challenge in the Region, particularly training and deploying of midlevel eye care personnel like ophthalmic assistants, technicians, clinical officers and refractionists (Table 2). It is recognized that midlevel personnel are the backbone of national programmes for prevention of blindness.

### **3. Technical presentations**

#### **3.1 *Current eye health status in the Region***

*Dr Abdul Hannan Choudhury*

There are over 6.3 million blind people in the Eastern Mediterranean Region, which has an estimated blindness prevalence of 1.3%. Cataract, trachoma, childhood blindness, glaucoma, refractive errors, low vision and diabetic retinopathy are the leading causes of visual impairment and blindness. There is a wide gap between the need and the available resources in many countries, such as Afghanistan, Djibouti, Iraq, Somalia, Sudan and Yemen. In contrast, advanced eye care services are found in GCC countries. Many countries have well developed tertiary eye care services, and some have good secondary care; however, primary eye care does not exist as such in the Region. Prompt advocacy among politicians, health professionals and communities is needed to prioritize the blinding diseases in national health plans and generate resources for their control. To generate reliable and current information, many countries need to strengthen their health information systems. WHO could assist such initiatives by providing technical support.

**Table 1. Situation of blindness in Eastern Mediterranean countries by sub-region**

<b>Group</b>	<b>Countries</b>	<b>Population (2002)</b>	<b>Estimated blind population</b>	<b>% of total blind population</b>	<b>Main causes of blindness</b>
A	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates	31 279 000	237 169	4	Cataract, trachoma, diabetic retinopathy, glaucoma
B	Afghanistan, Islamic Republic of Iran, Iraq, Pakistan	257 868 000	3 806 151	60	Cataract, corneal opacity, refractive errors, glaucoma, childhood blindness
C	Djibouti, Egypt, Libyan Arab Jamahiriya, Morocco, Tunisia	112 320 000	1 170 488	19	Cataract, corneal opacity, diabetic retinopathy
D	Jordan, Lebanon, Palestine, Somalia, Sudan, Syrian Arab Republic, Yemen	90 361 000	1 089 318	17	Cataract, trachoma, refractive errors, glaucoma
<b>Total</b>		491 828 000	6 303 126		

**Table 2. Human resources for eye care in the Eastern Mediterranean Region**

Country	Population (000) 2002	Number of ophthalmologists	Ophthalmologist to population ratio (1 per)*	Number of midlevel eye care personnel (MLEP)	MLEP to population ratio (1 per)*
Afghanistan	22 140	67	330 448	81	273 333
Bahrain	672	36	61 091	65	10 338
Cyprus	893	78	11 449	121	7380
Djibouti	751	4	187 750	8	93 875
Egypt	66 668	4200	15 873	1425	46 785
Iran, Islamic Republic of	65 201	1174	55 537	1850	35 244
Iraq	25 127	NA	NA	NA	NA
Jordan	5329	172	146 087	158	159 032
Kuwait	2 331	73	31 932	419	5563
Lebanon	4 260	252	16 905	110	38 727
Libyan Arab Jamahiriya	5 484	150	36 560	350	15 669
Morocco	29 637	954	31 066	NA	NA
Oman	2 538	91	25 912	95	24 821
Pakistan	145 400	1700	85 529	500	290 800
Palestine	3465	NA	NA	NA	NA
Qatar	616	24	25 667	42	14 667
Saudi Arabia	21 368	300	71 227	500	42 736
Somalia	7852	3	2 617 333	NA	NA
Sudan	32 718	111	294 757	857	38 177
Syrian Arab Republic	17 130	650	26 354	554	30 921
Tunisia	9 780	314	31 146	NA	NA
United Arab Emirates	3754	NA	NA	NA	NA
Yemen	19 606	64	306 344	44	445 591

NA: Data not available

\*VISION 2020 target 1:50 000

Most countries still have a substantial backlog of cataract and it is likely to increase in the future. Strategies for its control could include development of national plans, expansion of eye care in the underserved rural population at district level, augmenting human resource development and establishing linkages between different partners in eye care that would enable countries to achieve this goal.

The complex situation of blindness due to the persistence of emerging noncommunicable diseases of epidemic proportions, such as diabetes mellitus, poses a great challenge to the prevention of blindness programmes in countries. WHO is committed to collaborating with health ministries and nongovernmental organizations to prevent blindness in the Region.

### **3.2 VISION 2020 and disease control priorities and cataract**

*Dr Ivo Kocur*

The global initiative for the elimination of avoidable blindness by the year 2020 aims “to intensify and accelerate present prevention of blindness activities so as to achieve the goal of eliminating avoidable blindness by the year 2020”. WHO in partnership with nongovernmental organizations proposes to energize and accelerate activities within national programmes to address cataract, trachoma, river blindness, refractive errors/low vision and childhood blindness. The common strategies would focus on priorities, better coordination, promoting advocacy and mobilizing resources to achieve these goals. Major challenges foreseen are commitment from countries in view of competing demands, development of standardized monitoring and evaluation tools and formation of a regional coordination group. There had been significant progress in signing of the VISION 2020 declaration by different countries and initiating implementation of VISION 2020 plans at country level (Table 3). Data from different countries are used regularly to update information on VISION 2020 initiatives in different WHO regions.

**Table 3. Status of national programmes and VISION 2020 in the Region**

<b>National programmes for prevention of blindness being implemented</b>	<b>VISION 2020 has been launched</b>	<b>Efforts for launch of VISION 2020 ongoing</b>
Afghanistan	Afghanistan	Djibouti
Bahrain	Bahrain	Libyan Arab Jamahiriya
Islamic Republic of Iran	Egypt	Morocco
Jordan	Islamic Republic of Iran	Somalia
Morocco	Iraq	Syrian Arab Republic
Oman	Jordan	
Pakistan	Kuwait	
Sudan	Lebanon	
Tunisia	Oman	
Yemen	Pakistan	
	Palestine	
	Qatar	
	Saudi Arabia	
	Sudan	
	Tunisia	
	United Arab Emirates	
	Yemen	

### **3.3 *Comprehensive eye care programme and VISION 2020 management***

*Dr Mohammed Daud Khan*

Poverty, disease and ignorance are interlinked and indeed together greatly influence the disease burden. They need to be considered when planning a health programme. Dr Khan demonstrated how the preventive, promotive, curative and rehabilitative components could be translated in global, regional and national comprehensive programmes with the help of different partners and through their networking. He suggested that a unit of population, e.g. an administrative unit (district), could be used to implement a comprehensive eye care model. This would allow planning, implementation, evaluation and adjustment phases to be undertaken and impact to be determined. He emphasized the role of



community participation in the management of a comprehensive eye care programme. In programme management, physical and financial resource mobilization from all possible avenues should be considered. At different levels of eye care, standardized indicators should be used for evaluating progress. These should be different for the primary, secondary and tertiary levels of eye care. He suggested that poor eye health care could be said to be a reflection of poor professional and political commitment.

### **3.4 *Ultimate intervention goals for trachoma control***

*Dr Silvio Marriotti*

Based on the current information on trachoma, about 46 million people have active trachoma, 7.6 million have trichiasis and 3 million are blind due to complications of trachoma. The Eastern Mediterranean Region contributes 22% of the global burden of trachoma. The Ultimate Intervention Goal (UIG) for achieving blinding trachoma elimination is a prevalence of less than 5% trachomatous inflammation – follicular (TF) among 1–9 year-old children at community level. To determine the ‘A’ component of trachoma control strategies at district level, initial assessment of TF prevalence among children 1–9 years old should be conducted. If the prevalence of TF is 10% or more, mass treatment with antibiotic should be undertaken throughout the district. If TF prevalence is less than 10%, the assessment should be conducted among children 1–9 years old at the community level in known trachoma endemic areas. If TF is 10% or more, mass treatment with antibiotic in only the affected communities is recommended. If TF is <10%, “mass A” is not a priority. This intervention should be continued for a minimum period of three years and should not stop until TF in 1–9 year old children is less than 5%. To achieve the UIG, a programme should reduce trachomatous trichiasis (TT) cases from the current number to less than 1 per 1000 population. Programmes should calculate the number of cases which require TT surgery and translate their UIG into feasible annual treatment objectives. Initial assessment of the magnitude should be carried out through active case finding or a

population based survey. The total number of cases requiring TT surgery should be calculated to achieve UIG for TT. The programme should develop a strategy for active case finding and establish a management information system for TT cases. The activities which constitute the 'F and E' components will vary from country to country and should be defined at the national level.

### **3.5 *Primary eye care: foundation of community ophthalmology***

*Dr K. Konyama*

Primary eye care is prevention-oriented, community based and comprehensive in nature. It is an essential component in primary health care and strives to assure quality of health. Its aims are to prevent eye disease and promote eye health through simple clinical services and the health staff should have a clear knowledge of what to do and what not to do in dealing with common eye diseases. Dr Konyama explained the concept of an eye care team and eye care network. While setting priorities at primary levels, the magnitude, implication, vulnerability and the cost of intervention should be considered. He described a plan for primary eye care in Pakistan and the process of planning in Viet Nam. To build the capacities, primary eye courses should be conducted in phases that include a trainers course, a district course and a community course. He also showed how low-cost but useful assessment of eye disease could be done by utilizing such trained primary eye care personnel.

### **3.6 *Screening of schoolchildren for early detection of refractive errors***

*Dr Abdul Hannan Choudhury*

Uncorrected refractive errors are one of the leading causes of visual impairment in the Region. The intervention goal is to make refractive services available and affordable. It could be achieved by adopting strategies for introducing refractive services at primary health care level, conducting vision screening for children and having local low cost production of spectacles. Different age groups of

children have different problems and needs. Dr Choudhury cautioned that efficiency of vision screening and compliance with wearing of spectacles differs among age groups. Schoolteachers trained in procedures could be the first level vision screeners. Eye examination and refraction could be done by opticians and those with eye disease could be evaluated and treated by ophthalmologists. Vision screening will help the children to perform better in educational activities and also help to increase awareness about the need for good vision among the community.

### **3.7 *Childhood blindness***

*Dr Tayyab Afghani*

Sixty per cent of blind children die within the first 2 years of life. Those who survive face many decades of blindness. Since the access to and high cost of special education are major barriers in many countries, prevention of childhood blindness should be a priority. At present, globally 1.5 million children are blind. More than 80% of them live in Asia and Africa. Around 200 000 blind children are estimated to live in the Region. Children with low vision are nearly three times the number of blind children. Hereditary diseases, vitamin A deficiency, cataract and glaucoma are the leading causes of childhood blindness. Retinopathy of prematurity is an important cause in industrialized countries and in developing countries with well developed neonatal care services. As hereditary causes are assuming greater importance, the burden of unavoidable blindness is expected to increase. Developing countries should plan especially to generate resources to address these problems.

### **3.8 *How to create a team for a vision service***

*Dr Lea Hyvärinen*

Any vision service is a product of teamwork. Such a service should be connected to an eye clinic and rehabilitation centre. The Nordic vision team comprises of a vision therapist, ophthalmologist, optometrist, psychologist, social worker, activities of daily living

teacher, secretary and orientation and mobility instructor. Dr Hyvainen stressed the need for creating awareness among paediatricians, geriatricians, general physicians, therapists and rehabilitative centres for low vision services. In presence of multiple disabilities, vision testing is a challenge. Skilled personnel in specific fields, use of special testing tools and health education materials could be available from different international organizations. The existing WHO guidelines for testing vision do not support the rehabilitative needs of low vision and revision and adoption of different guidelines for this purpose was suggested.

### **3.9 Principles of needs assessment and health planning for VISION 2020**

*Dr Sameen Siddiqi*

The cardinal steps of a planning process are: situation analysis; laying goals/objectives; formulating strategies; implementation of activities; and measuring the progress of the implementation. Dr Siddiqi described the difference between health programmes and health systems. Health information is required at all stages of planning. He outlined the planning matrix for strategies and intervention activities and presented guidelines for the scientific approach to planning. In evaluating the VISION 2020 plan, care should be taken to address accessibility, efficiency, equity in financing and provision, maintaining quality and making the plan sustainable.

### **3.10 Projections for eye care needs and services – a template**

*Dr Haroon Awan*

Projections should be considered while developing national VISION 2020 plans. This is important from a planning perspective because one can compare projections of activities like human resource development or disease control, e.g. in cataract or trachoma, against recommended VISION 2020 targets. Dr Awan presented a template in Excel format that was simple to use and could complement the CD-

ROM “Developing an Action Plan to prevent blindness at national, provincial and district levels”.

### ***3.11 Indicators for monitoring and evaluation of the programme***

*Dr Ivo Kocur*

Dr Kocur discussed monitoring of VISION 2020 programmes at the national and regional levels. There is a need to monitor throughout the programme period with particular reference to keeping track of administrative and programme activities. He differentiated between monitoring, which was an ongoing process, and evaluation which was generally done at the end of a project. He stressed the need for predetermined indicators to monitor the progress of implementation. These may measure quantity, quality, efficiency, effectiveness, and may be used to monitor availability or utilization of resources, e.g. human, material and financial resources, or may also be used to monitor trends. He recommended that indicators used for monitoring should be specific, measurable, attainable, reliable and time-bound.

### ***3.12 Role of nongovernmental organizations in VISION 2020 for the Region***

*Dr Saleh Memon and Dr Adel Rushood*

The magnitude of global blindness will increase from 5 million in 1949 to about 75 million in 2020. This magnitude is further compounded by the fact that the population is increasing as well as ageing. The blind population will continue to increase by 2 million people every year unless proactive action is taken. This includes activities related to disease control and eye care service development, human resource development and provision of appropriate technology and infrastructure. Nongovernmental organizations have a key role to play in global intervention through their inputs in service delivery, human resource development, advocacy, coordination and resource mobilization. Horizontal and vertical linkages are very important, particularly between eye care services,

development, education and rehabilitation. Similar linkages should also be established between government and nongovernmental agencies.

### ***3.13 Guidelines on how to develop a national VISION 2020 plan***

*Dr Haroon Awan*

Dr Awan presented the key elements and approaches that are required to develop a national VISION 2020 plan. He compared the management of VISION 2020 programmes to that found in business or industry. These elements are comprised of planning, organizing, staffing, leading, controlling and coordinating. He summarized the planning process in ten key steps that included establishing strategic objectives, establishing a need, conducting a situation analysis, determining the gaps between available and desired resources, setting priorities and criteria, defining goals and objectives, exploring ways and means to mobilize resources, developing a clear human resource development plan, undertaking advocacy and awareness, and determining how a pilot phase would be replicated more extensively within the country. He concluded that a national VISION 2020 plan was part of a wider process with links to education and rehabilitation and needed to be developed through referral and network linkages.

### ***3.14 Regional coordination between WHO, IAPB and nongovernmental organizations***

*Dr Ahmed Trabelsi*

There is strong need to enhance coordination of activities, as tremendous resources are available within the Region. One of the key impediments to developing sound VISION 2020 programmes is a lack of strategic vision and coordination between member countries. The VISION 2020 planning meeting is a first step in the right direction as participants from countries are being exposed to regional issues and have the opportunity to learn from one another and gain better knowledge of programme planning. There is also need for a regional

coordinating forum that could study regional issues in eye care delivery and recommend strategies to address them. Dr Trabelsi proposed that a Regional Coordination Group be set up with representation of IAPB, WHO and key regional nongovernmental organizations involved in eye care and recommended to maintain the vital linkage of the group with the International Council of Ophthalmology.

## **4. Country presentations**

### **4.1 *Afghanistan***

The population is 22 million. Although reliable current data are not available, it is estimated that the prevalence of blindness is 1.5% to 2%, with cataract, corneal opacities, refractive error, glaucoma and childhood blindness as the leading causes of blindness. Eye care services are still very limited in the country. In 2002, the cataract surgery rate was 400 to 500 per million population. High cost, poor access and lack of awareness are major barriers to addressing the cataract problem. Trachoma seems to be a problem in the endemic areas of the country and the estimated prevalence could be between 1.5% and 2%. Nearly 850 trichomatous trichiasis cases were operated on in 2002. A regular system for screening children does not exist. Indirect indicators such as vaccination coverage and infant mortality rate suggest that childhood blindness, especially due to nutritional causes, could be high. 93 ophthalmologists and a few midlevel supporting staff are mainly located in urban areas. A national committee was formed in 2002 and a VISION 2020 plan was adopted as a national programme with a five year action plan. Assessment of vitamin A deficiency, trachoma and cataract, introduction of school screening, increasing the cataract surgical rate and generating resources for eye care are the main strategies incorporated in this plan.

#### **4.2 Bahrain**

The country has a population of 672 000. The vital statistics and the infrastructure suggest that health facilities and eye care services are quite well developed. 38 ophthalmologists and sufficient support staff are available in Bahrain. The community based prevalence study in 1997 suggested blindness and low vision rates to be 1.9% and 4% respectively. Cataract, glaucoma, diabetic retinopathy, refractive error and corneal opacities were the leading causes of blindness. In March 2001, Bahrain joined VISION 2020 which aims to eliminate preventable causes of blindness by the year 2020. The cataract surgery rate (CSR) is 1190 per million population. The system for detection and digital documentation of diabetic retinopathy has been established through the primary and secondary health care system. Childhood blindness is mainly due to hereditary diseases with consanguinity as the major underlying cause. Early detection of glaucoma, establishing a programme for prevention of occupational eye trauma and starting a diploma course for opticians are the main future activities planned in Bahrain.

#### **4.3 Djibouti**

Djibouti is a small country in the horn of Africa with a population of 690 000 that has faced civil conflict in the recent past. There is no indigenous ophthalmologist or any prevention of blindness programme in the country. Previously a French ophthalmologist was working in the Ministry of Health hospital but recently left without any replacement. A few nongovernmental organizations run ophthalmic hospitals and conduct eye camps. However, relevant data are not available. The country needs to assess the current situation, develop human resources for eye care, generate a sustainable programme and promote advocacy for VISION 2020 to reduce avoidable blindness.

#### **4.4 Egypt**

The national survey projected a 1.2% blindness rate in the country that has a population of 65 million. Cataract, corneal opacity,



diabetic retinopathy, glaucoma and trachoma are the leading causes of blindness. The prevalence of low vision was 4.8%. The CSR is 690 per million population, with only 54% operated with intraocular lens implantation and a large backlog of un-operated cataract cases. There are 4800 ophthalmologists both in the government and private sectors. Integration of primary eye care into primary health care, building capacity of health staff in eye care and strengthening the secondary units were strategies recommended to further improve the programme. A VISION 2020 sensitization workshop was held in Cairo during World Sight Day on 11 October 2003 and was attended by the First Lady of Egypt. Recommendations of the workshop were submitted to the Ministry of Health and Population for possible implementation of VISION 2020.

#### **4.5 Islamic Republic of Iran**

The Islamic Republic of Iran has a population of 65 million people. The prevalence of blindness and low vision are 0.8% and 2.5% respectively. Refractive error, cataract, glaucoma and corneal pathology are the leading causes of blindness. The prevention of blindness programme is well established since 2001. The CSR was 1367 per million population in 2002. Four south-eastern districts have been found to be trachoma endemic areas. Diabetic retinopathy and glaucoma are the emerging blinding eye diseases in the country. The primary and secondary eye care complex is established at all districts. There are 1174 ophthalmologists in the country, who are distributed in both urban and rural areas. The national VISION 2020 plan was signed in 2002 with the declaration of support.

#### **4.6 Jordan**

The country has adequate health facilities to cater for its 6.3 million population. A national committee for VISION 2020 was formed in 2000 and the national programme was launched in 2002. The prevalence of blindness and low vision in 1997 was 0.6% and 4.9% respectively. Cataract, refractive error, diabetic retinopathy and glaucoma were the leading causes of blindness. Nearly 7000 cataract operations were conducted in the services run by the Ministry of

Health. However, there are few data from the private sector. Primary health care is not developed to deal effectively with blindness prevention. Rehabilitation services need strengthening. Lack of training and unavailability of surgical equipment are major challenges.

#### **4.7 Kuwait**

Although the country representative could not attend the workshop, country data submitted indicated that Kuwait, with a population of 2.2 million, had a blindness prevalence rate of 0.8%. Cataract, diabetic retinopathy, sequelae of trachoma and glaucoma were the leading causes of blindness. The CSR is reported to be 700 per million population. Fifty ophthalmologists provide secondary and tertiary eye care services.

#### **4.8 Lebanon**

The representative of Lebanon could not attend the workshop. However, data submitted earlier show the estimated prevalence of blindness is 0.7%, with about 29 500 blind people among a national population of 4.2 million. The causes of blindness are cataract, glaucoma, diabetic retinopathy and retinal diseases. Although the CSR is not known, nearly 90% of cataracts are operated with intraocular lens implantation. There are nearly 540 ophthalmologists in the country. Information on midlevel personnel and programme management was not available. The VISION 2020 initiative was launched in Lebanon in 2001, with the presence of the First Lady of Lebanon.

#### **4.9 Libyan Arab Jamahiriya**

The population is 5.9 million, and the prevalence of blindness is 0.8%. Cataract, trachoma, glaucoma, diabetic retinopathy, refractive error and low vision are the leading causes of blindness. A VISION 2020 sensitization workshop was held in 2003. Most of the eye care facilities are available in the big cities and in the rural areas foreign eye specialists are working with very limited facilities. Advocacy, resource generation, early detection of eye diseases through school

and community screening and strengthening eye care services are the main strategies proposed in the country. There is strong political commitment from the government for the prevention of blindness programme and VISION 2020 will be launched soon.

#### **4.10 Morocco**

The population is 29.6 million. A survey in 1992 showed the prevalence of blindness and low vision to be 0.8% and 2.3% respectively. Cataract, glaucoma, corneal opacities and phthisis bulbi were the leading causes of blindness. There is a well established national policy for ocular health since the 1990s. The CSR was 725 per million population in 2002. There is a substantial improvement in the eye care programme and expansion of eye care in the district level for the last few years. Intensive efforts for implementation of SAFE trachoma control strategies in five high endemic districts of Morocco in the past ten years have resulted in a marked decline in the prevalence of trachoma. Elimination of blinding trachoma is aimed at by 2005. Annual school screening initiatives are employed to address refractive error problems and identify children with low vision. A prevalence of blindness study is proposed in 2004–2005. VISION 2020 will be launched soon.

#### **4.11 Oman**

Oman is a country with a 2.4 million population and a 1.1% blindness prevalence rate, according to a 1997 survey. Cataract, trachoma, corneal diseases, refractive error, diabetic retinopathy, glaucoma and ocular trauma are the priority blinding eye diseases. The VISION 2020 national plan was prepared in 1999 and is incorporated in a 5-year national health plan. Its key strengths lie in its organized primary eye care approach, decentralized secondary eye care services, and the existence of a functional national eye health care committee and programme. The CSR was 2120 per million population in 2002. Effective implementation of the components of trachoma control makes the initiative sustainable in the country. A screening and referral system of diabetic retinopathy is a model that could be useful in control of diabetes related blindness. Research

related to eye health programme management and health information systems are useful tools for the programme. Generation of local human resources, training in low vision and establishing linkages are future strategies proposed in Oman.

#### **4.12 Pakistan**

The population of Pakistan is 145 million. Governmental, nongovernmental and private sectors contribute to the eye care services in the country. The national survey conducted in 1987 showed a blindness prevalence rate of 1.78%. Recent studies have suggested a rate as low as 1%. A repeat national blindness survey was completed in 2003; the results will be available in 2004 and will be used to plan and develop the third 5-year national plan for prevention of blindness. The national programme for prevention of blindness is managed and coordinated through its national and provincial level prevention of blindness committees. Although its 1700 ophthalmologists are adequate for the present country needs, training of more community ophthalmologists and midlevel eye care personnel is needed. The required future needs can be trained within the country. The primary–secondary complex model for comprehensive eye care has been introduced in 50 out of 120 districts. The CSR is 2250 per million population. A rapid assessment for trachoma was done at national level and trachoma endemic areas were identified. International linkages to implement sustainable trachoma control initiatives are proposed. Optical and low vision services are well developed in the country. A declaration for VISION 2020 was signed by Federal Minister of Health in 2001. In the VISION 2020 component for control of childhood blindness, development of 3 paediatric ophthalmology units is proposed in the next 5 years. The national programme plans to develop and strengthen linkages between eye care, education and rehabilitation.

#### **4.13 Palestine**

Palestine has a population of 3.2 million and is divided into two parts (West Bank and Gaza) with a major problem of accessibility to health services and implementation of eye health care activities. The

ongoing conflict has negatively affected programme development and its management. The blindness prevalence rate is 0.7%, with cataract, diabetic retinopathy and glaucoma as the leading causes of blindness. In view of the current situation, an intermediate eye care strategy has been adopted where ophthalmologists visit areas with displaced populations, provide treatment and refer complicated cases to the tertiary hospitals.

#### **4.14 Qatar**

Qatar has a population of 600 000, of which 80% live in the capital. Population based data on blindness and low vision are not available. Hospital based studies show glaucoma, cataract, corneal opacities and retinal diseases as the leading causes of blindness. In addition, refractive errors and diabetic retinopathy are the main causes of low vision. The CSR is 636 per million population, with the majority of cases being operated on using advanced microsurgery and phacoemulsification techniques. The school student screening initiative is expected to commence within the next year, with support from school health and primary health care. With 35 ophthalmologists, supporting staff and 8 local ophthalmologists under training, Qatar has adequate human resources. There is strong political support for the programme, and a declaration for the VISION 2020 initiative was signed in 2002. There is a need to develop the national plan to eliminate avoidable causes of blindness in the country.

#### **4.15 Saudi Arabia**

The country has a population of 21.4 million. The last national survey in 1984 showed a blindness prevalence rate of 1.5%. Subsequent focal surveys suggest a marked decline of the blindness rate. There are 373 ophthalmologists, of whom only 20% are nationals. All supporting ophthalmic staff are adequate. 60% of eye care is offered by government institutions. 3506 primary health centres, 314 general hospitals, 20 units with secondary eye care and one tertiary unit, the King Khaled Eye Specialist at Riyadh, exist in the country. Corneal transplants, refractive surgeries and other

modern subspecialties are available in the tertiary unit. It is a leading teaching unit for Middle Eastern countries. Eye care for diabetics and glaucoma patients is provided at secondary level. However, the current national magnitude of diabetic retinopathy is not known. VISION 2020 was launched in 2002. Development of national plan for VISION 2020, development of local human resources with integration of primary eye care within the health care is the priority of Saudi Arabia.

#### **4.16 Somalia**

Somalia has 7.8 million people. Ongoing conflict and poor access make health care delivery a priority. Indirect health indicators suggest that nutritional and communicable disease related health problems are still the leading causes of mortality and morbidity. The estimated blindness prevalence rate is 1.2%, with about 100 000 blind people. The CSR is low, at 284 per million population. Major causes of blindness are cataract, corneal opacity, refractive errors and glaucoma. The national programme for the prevention of blindness has not yet been developed, nor has any national VISION 2020 committee been established. Primary eye care is not yet integrated within primary health care. Urgent support is needed in the country for planning for VISION 2020 and undertaking prevention of blindness activities.

#### **4.17 Sudan**

The country has a population of 32.8 million. The prevalence of blindness and low vision is estimated to be 1.5% and 4.5% respectively. Cataract, trachoma, glaucoma and other diseases including onchocerciasis are the leading causes of visual impairment and blindness. The CSR is 800 per million population. Due to long civil war, many government health facilities were destroyed or need urgent rehabilitation. Recently WHO has supported many of the of the eye units including the teaching hospital in Khartoum by supplying the basic eye care equipment. Nearly 380 000 un-operated cataract cases exist in Sudan. The exact magnitude of refractive errors is not known. Low vision services are yet to be initiated in the

country. The childhood blindness rate is 12 per 10 000 children. Trachoma remains a major public health problem in Sudan. Onchocerciasis is reported in eastern and northern districts of Sudan and a well functioning programme exist that distributes ivermectin with the help of community involvement. Low awareness, lack of services and cost of medications are main obstacles in the prevention of blindness due to glaucoma. 12 ophthalmic units and one tertiary unit for eye care are available in the country. Primary eye care is yet to be integrated into the primary health care system. VISION 2020 was launched in February 2002 and integration is the first priority of the prevention of blindness programme.

#### **4.18 Syrian Arab Republic**

The Syrian Arab Republic has a population of 16.3 million and an estimated blindness prevalence of 0.7%. There are about 117 000 blind people in the country. Cataract, refractive errors, glaucoma and diabetic retinopathy are the leading causes of visual impairment and blindness. The ophthalmologist to population ratio is 1:20 000 and they are distributed in rural areas as well. The CSR is 1770 per million population and access to cataract surgical services is easy and free of cost. The training of ophthalmic and midlevel eye care staff in universities and the government institutions is adequate to cope with the future needs. However, integration of primary eye care into primary health care, developing the VISION 2020 national plan with formation of national committee as well as strengthening the health information system and rehabilitation of visually impaired are future needs.

#### **4.19 Tunisia**

Tunisia has a population of 9.8 million. Basic ophthalmic care is available in 2008 primary health centres. There are 187 eye care units run by 350 ophthalmologists. Of these, 13 are tertiary institutions. There are sufficient paramedical staff, but no optometrists are present in the country. The prevalence of blindness and low vision was 0.8% and 2% respectively in 1993. Cataract, retinal diseases and glaucoma were the main causes of blindness. The CSR is 1325 per million

population. Annually, 13 000 cataracts are operated. Of these, 300 are congenital cataract. The prevalence of childhood blindness is low and health clubs in primary health centres have ocular screening programmes. Training of children with low vision is undertaken with the help of nongovernmental organizations. The VISION 2020 initiative was launched in Tunisia in October 2001.

#### **4.20 United Arab Emirates**

The population is 3.7 million. 44% of ophthalmologists are working in government hospitals, while the remaining are in the private sector. The estimated prevalence of blindness is 0.7%, with cataract, diabetic retinopathy, glaucoma and retinal diseases as leading causes of blindness. Trachoma and vitamin A deficiency are not public health problems. The VISION 2020 initiative was launched in 2003. Development of national plan and integration of primary eye care within the primary health care is the priority.

#### **4.21 Yemen**

The population is 19.6 million. The estimated prevalence of blindness is 1.5%, with about 300 000 blind people. Cataract, diabetic retinopathy, corneal opacities and glaucoma are the leading causes of blindness. Primary eye care facilities are available in most districts, while secondary eye care is found predominantly in urban areas. The CSR is 650 per million population. Cost, accessibility and availability of services are the main barriers. Trachoma is reported in a few pockets, but further assessment is required. There is no eye health screening programme in schools and the high cost of spectacles limits compliance. The prevalence of childhood blindness is not known. Onchocerciasis is no longer a public health problem in the country. Yemen has 200 ophthalmologists, but few midlevel eye care staff. Although VISION 2020 was launched in 2002, a national committee is still to be established. Expansion of eye care in the district level and integration of primary eye care within the primary health care are the priorities for Yemen.



#### **4. Group work**

The participants were divided into four groups, each with WHO and IAPB facilitators, international resource persons, representatives of nongovernmental organizations and observers. Dr Rajiv Khandekar explained to the participants that the main objectives of the group exercises were to exchange ideas on situation assessment and programme planning, generate current data on eye care from the member countries on a standard format that could be used to develop a regional database, and seek the input of the groups to develop regional strategies and recommendations for implementation of VISION 2020 within the Region. A template was given to each group for collecting data of each country and indicators that could be used for group exercise and presentation. It was decided that in view of the limited time, the group exercises would not focus on developing country plans. In the group work, the participants discussed issues of resource and needs assessment, strategies for infrastructure and human resource development, equipment needs and programme planning. The discussions and recommended strategies of the groups, which are reflected in the Recommendations section below, are summarized in Annex 4.

#### **5. Recommendations**

##### **To Member States**

1. Establish national VISION 2020 plans no later than 2005 and commence implementation of such plans by 2007 at the latest.
2. Update existing information on the major causes of visual impairment and blindness and the current status of available eye health care services and develop national data centres for collation, analysis and reporting of information related to eye care.
3. Adopt a district focus strategy and use a district comprehensive eye care model for planning and implementation.

4. Focus on development of primary eye care as a priority and its integration within existing primary health care programmes.
5. Seek to strengthen linkages between eye care and education and rehabilitation services, particularly in the context of district comprehensive eye services.
6. Use the CD-ROM "Developing an action plan to prevent blindness at national, provincial and district levels" for preparing national VISION 2020 plans.
7. Ensure that national VISION 2020 plans include specific areas of eye health care services as follows.
  - 7.1 *Service delivery and disease control*
    - Give priority to strengthening the secondary and primary level eye care services together with the referral network within the primary–secondary complex.
    - Focus on all major causes of blindness in respective countries in addition to the issue of increasing output and improving outcome in cataract control programmes.
    - Include development of refractive and low vision services.
    - Integrate vertical control programmes, e.g. for onchocerciasis and trachoma, into national VISION 2020 plans.
    - Ensure that sustainability and equity are considered in planning for development of eye care services.
  - 7.2 *Human resource development*
    - Determine national human resource requirements based on VISION 2020 targets and explore educational and training opportunities sub-regionally and regionally.
    - Adopt an eye care team approach and ensure that plans address the issue of midlevel eye care personnel and include strategies for their training and deployment.
  - 7.3 *Infrastructure and appropriate technology*
    - Undertake a situation analysis of infrastructure and equipment available within the service centres to help in determining needs, setting priorities and exploring resource options.
    - Seek to develop appropriate and affordable optical services in national VISION 2020 plans.

#### 7.4 *Advocacy and awareness*

- Include advocacy strategies to create an enabling environment for the delivery of eye health care and incorporate public awareness and health education on eye care.

#### 7.5 *Monitoring and evaluation*

- Include monitoring and evaluation as part of planned programme development.
- Follow “A framework and indicators for monitoring VISION 2020 – The Right to Sight”, published by WHO, when designing a list of indicators for VISION 2020 programmes.

8. Encourage partnerships between the public sector, nongovernmental organizations and the private sector for VISION 2020 programmes.

### **To WHO**

9. Provide guidance and support for the planning, development and implementation of national VISION 2020 action plans and promoting technical cooperation among developing countries within the Region.
10. Prioritize blindness and low vision as a regional health priority and provide necessary support.
11. Propose and promote control of blindness as a development goal for the Region.
12. Advance the integration of VISION 2020 within existing health programmes at regional and national level, e.g. integrated management of childhood health (IMCI), maternal and child health, expanded programme on immunization (EPI), noncommunicable diseases, basic development needs (BDN) and primary health care.
13. Develop a regional resource centre for information on major causes of blindness and visual impairment and eye health care services.
14. Ensure continued regional support for prevention of blindness activities.

15. Introduce a short training programme in blindness prevention and eye care programme management for national programme managers.
16. Establish a regional coordination group to promote coordination, linkages and resource mobilization, with particular focus on seven priority countries, namely Afghanistan, Djibouti, Iraq, Palestine, Somalia, Sudan and Yemen.
17. Promote the development of regional, subregional and, where necessary, interregional linkages between national centres specialized in eye care human resource development, service delivery and operational research.

*Annex 1*  
*Agenda*

1. Opening session
2. Launching VISION 2020 in Egypt, Iraq and Palestine
3. Plenary session
4. Election of officers
5. Adoption of agenda
6. Scope, purpose and expected outcome of the workshop
7. Country presentations
8. Group work
  - a) Disease control
  - b) Human resources
  - c) Infrastructure supplies and equipment, management of comprehensive eye care
9. Group presentations and discussions
10. Guidelines for development of national plans
11. Conclusions and recommendations
12. Closing session

*Annex 2*  
**Programme**

**Sunday, 14 December 2003**

09:00–10:00	Registration
10:00–11:30	Opening session Opening address by Dr Hussein A. Gezairy, Regional Director, WHO/EMRO Address by H.R.H. Prince Abdulaziz Bin Ahmed Bin Abulaziz Al Saud, Regional Chair, IAPB VISION 2020 video presentation Scope, purpose and outcome of the VISION 2020 strategic planning workshop By Dr Mohamed Abdi Jama, Deputy Regional Director, WHO/EMRO Message from H.E. Dr Mohamed Tag-El-Din, Minister of Health and Population, Egypt
11:30–13:25	Plenary session
11:30–11:45	Introduction of participants
11:45–11:55	Election of officers (Chair, Co-Chair and Rapporteurs)
11:55–12:15	Present eye health status in the Region by Dr A. Choudhury, WHO/EMRO
12:15–12:25	Vision 2020 programme and the role of WHO/IAPB partnership by Dr Akef Maghraby, President, PAACO and Al Noor Foundation
12:25–12:40	VISION 2020 and disease control priorities and cataract by Dr Ivo Kocur, WHO/HQ
12:40–12:55	Comprehensive eye care programme by Dr Mohammed Daud Khan, WHO Temporary Adviser
12:55–13:10	Trachoma and the SAFE strategy by Dr S. Mariotti, WHO/HQ
13:10–14:30	Primary eye care by Dr K. Konyama, Japan
14:30–17:30	Item no. 1: Situational analysis (Each country 10 minutes presentation)
14:30–15:30	Country presentation (Afghanistan, Bahrain, Djibouti, Egypt, Islamic Republic of Iran, Iraq)

- 15:50–16:50 Country presentations (Jordan, Lebanon, Libyan Arab  
Jamahiriya, Morocco, Oman, Pakistan)
- 16:50–17:30 Discussion on country presentations

**Monday, 15 December 2003**

- 08:30–10:30 Item no. 1: Situation analysis (cont'd)
- 08:30–10:00 Country presentations (Palestine, Qatar, Saudi Arabia,  
Somalia, Sudan, Syrian Arab Republic, Tunisia, United  
Arab Emirates, Yemen)
- 10:00–11:00 Discussion on country presentations and summary by  
chairperson
- 11:00–13:05 Item no. 2: Technical presentations
- 11:00–11:10 Screening of schoolchildren for early detection of  
refractive error by Dr A. Choudhury, WHO/EMRO
- 11:10–11:20 Childhood blindness by Dr Tayyab Afghani, Pakistan
- 11:20–11:35 How to create a team for vision service by Dr Lea  
Hyvärinen, WHO Temporary Adviser
- 11:35–11:45 Principles of needs assessment and planning by Dr  
Sameen Siddiqi, WHO/EMRO
- 11:45–11:55 Projection for eye care needs and services – a template by  
Dr Haroon Awan, WHO Temporary Adviser
- 11:55–12:10 Indicators for monitoring and evaluation of the  
programme by Dr Ivo Kocur, WHO/HQ
- 12:10–12:20 Role of NGOs in VISION 2020 for the Region by Dr Adel  
Al Rashood, WHO Temporary Adviser
- 12:20–13:00 Discussion
- 13:00–14:00 Introduction to group work by Dr A. Choudhury,  
WHO/EMRO and Dr Rajiv Khandekar, WHO Temporary  
Advisor
- 14:00–16:00 Item no. 3: Group work on disease control for sub-regions
- 16:00–17:00 Group presentations and discussion (Group A, B, C, D)

**Tuesday, 16 December 2003**

- 08:30–09:30 Item no.4: Group work on human resources for sub-regions
- 09:30–11:00 Group presentations and discussion
- 11:00–14:30 Item no.5: Group work on  
a. Infrastructure, equipment and supplies  
b. Management, advocacy, linkage and coordination for comprehensive eye care in sub-regions
- 14:30–16:00 Group presentations and discussion (Group A, B, C, D)

**Wednesday, 17 December 2003**

- 08:30–9:00 Plenary presentation  
Guidelines on how to develop the national plan of VISION 2020 by Dr Haroon Awan, WHO Temporary Adviser
- 9:00–10:00 Group work for regional strategies
- 10:00–11:00 Group presentations (two slides for each group)
- 11:00–12:00 Plenary session 2  
Regional coordination group between WHO, IAPB and NGOs by Dr Ahmed Trabelsi
- 12:00–13:00 Closing session  
Recommendations of the workshop by Dr A. Choudhury, WHO/EMRO



*Annex 3*  
**List of Participants**

**AFGHANISTAN**

Dr Ahmad Shah Salam  
National Coordinator for Comprehensive Eye Care  
Ministry of Health  
**Kabul**

**BAHRAIN**

Dr Ebtesam Al-Elwi  
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**EGYPT**

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**Cairo**

**ISLAMIC REPUBLIC OF IRAN**

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Eye Care Programme, Center for Disease Control  
Ministry of Health and Medical Education  
**Teheran**

**IRAQ**

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Ophthalmologist  
Health Friends Organization  
**Baghdad**

**JORDAN**

Dr Adel Belbeisi  
Director, Disease Monitoring  
Ministry of Health  
**Amman**

**LIBYAN ARAB JAMAHIRIYA**

Dr Sauad Al-Faturi  
Head, National Committee for Prevention of Blindness and Eye  
Diseases  
Tripoli Ophthalmic Hospital  
**Tripoli**

**MOROCCO**

Dr Youssef Chami Khazraji  
Head of Communicable Diseases  
Directorate of Epidemiology and Diseases Control  
Ministry of Health  
**Rabat**

**OMAN**

Dr Abdullatif bin Hussein Al-Raisi  
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**PAKISTAN**

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National Coordinator, Professor of Ophthalmology  
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**Lahore**

**PALESTINE**

Dr Maged Abu Ramadan  
Director General, International Cooperation Department  
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**Gaza**

**QATAR**

Dr Hamad Mohd Al Gamra  
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**Doha**

**SAUDI ARABIA**

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**SUDAN**

Dr Kamal El-Din Hashim  
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National Coordinator for Prevention of Blindness  
Al Walidain Eye Hospital  
**Khartoum**

**SYRIAN ARAB REPUBLIC**

Dr Rida Said  
National Programme Director for Blindness Control  
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**TUNISIA**

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**UNITED ARAB EMIRATES**

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Consultant/Director Ophthalmology Department  
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**Sharjah**

**YEMEN**

Dr Aziz Shaher  
Head, Eye Department  
Al Thawra General Hospital  
**Sana'a**

**WHO COLLABORATING CENTRES**

Dr Tayyab Afghani  
Al Shifa Trust Eye Hospital  
Rawalpindi, Pakistan

Dr Saeed Ben Mofleh Al Kehaiden  
Consultant Ophthalmologist  
King Khaled Eye Specialist Hospital  
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Islamabad, Pakistan

Dr Gamal Ezz El Arab  
Medical Director  
El-Maghraby Eye and Ear Hospital  
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Dr Lea Hyvärinen  
Consultant Ophthalmologist, Honorary Professor  
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Helsinki, Finland

Dr Mohammad Daud Khan  
Chief Executive  
Hayatabad Medical Complex  
Peshawar, Pakistan

Dr Rajiv Khandekar  
Ophthalmologist and Epidemiologist  
Ministry of Health  
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**Al Bassar International Foundation**

Dr Syed Shariq Masood  
Al Khobar, Saudi Arabia

**Al-Ibrahim Eye Hospital**

Dr Muhammad Saleh Memon  
Director  
Karachi, Pakistan

**Al Noor Foundation**

Dr Akef El-Maghraby  
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Asmara, Eritrea

Ms Nadra Idris Hussen

QA Manager, Intraocular Lens Laboratory  
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**Hellen Keller International**

Dr Driss Bensaïd  
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**IMPACT-EMR**

Dr Mohamad Alamudin  
Secretary-General  
United Medical Group  
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**International Agency for Prevention of Blindness (IAPB)**

H. R. H. Prince Abdulaziz Bin Ahmed Bin Abdulaziz Al-Saud  
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Dr Abdul Aziz Al Rajhi  
Regional Co-chair  
Riyadh, Saudi Arabia

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*Annex 4****Fifty-Sixth World Health Assembly Resolution WHA56.26:  
Elimination of avoidable blindness***

The Fifty-sixth World Health Assembly,  
Having considered the report on elimination of avoidable blindness;  
Recalling resolutions WHA22.29, WHA25.55 and WHA28.54 on prevention of blindness, WHA45.10 on disability prevention and rehabilitation, and WHA51.11 on the global elimination of blinding trachoma;

Recognizing that 45 million people in the world today are blind and that a further 135 million people are visually impaired;

Acknowledging that 90% of the world's blind and visually impaired people live in the poorest countries of the world;

Noting the significant economic impact of this situation on both communities and countries;

Aware that most of the causes of blindness are avoidable and that the treatments available are among the most successful and cost-effective of all health interventions;

Recalling that, in order to tackle avoidable blindness and avoid further increase in numbers of blind and visually impaired people, the Global Initiative for the Elimination of Avoidable Blindness, known as Vision 2020 – the Right to Sight, was launched in 1999 to eliminate avoidable blindness;

Appreciating the efforts made by Member States in recent years to prevent avoidable blindness, but mindful of the need for further action;

1. URGES Member States:
  - (1) to commit themselves to supporting the Global Initiative for the Elimination of Avoidable Blindness by setting up, not later than 2005, a national Vision 2020 plan, in partnership with WHO and in collaboration with nongovernmental organizations and the private sector;
  - (2) to establish a national coordinating committee for Vision 2020, or a national blindness prevention committee, which may

- include representative(s) from consumer or patient groups, to help develop and implement the plan;
- (3) to commence implementation of such plans by 2007 at the latest;
  - (4) to include in such plans effective information systems with standardized indicators and periodic monitoring and evaluation, with the aim of showing a reduction in the magnitude of avoidable blindness by 2010;
  - (5) to support the mobilization of resources for eliminating avoidable blindness;
2. REQUESTS the Director-General:
- (1) to maintain and strengthen WHO's collaboration with Member States and the partners of the Global Initiative for the Elimination of Avoidable Blindness;
  - (2) to ensure coordination of the implementation of the Global Initiative, in particular by setting up a monitoring committee grouping all those involved, including representatives of Member States;
  - (3) to provide support for strengthening national capability, especially through development of human resources, to coordinate, assess and prevent avoidable blindness;
  - (4) to document, from countries with successful blindness prevention programmes, good practices and blindness prevention systems or models that could be modified or applied in other developing countries;
  - (5) to report to the Fifty-ninth World Health Assembly on the progress of the Global Initiative.

*Annex 5*  
**Summary of group work**

*Overview*

The participants were divided into four groups, each with WHO and IAPB facilitators, international resource persons, representatives of nongovernmental organizations and observers.

**Group A:** GCC member countries

**Group B:** Afghanistan, Islamic Republic of Iran, Iraq and Pakistan

**Group C:** Djibouti, Egypt, Libyan Arab Jamahiriya, Morocco and Tunisia

**Group D:** Palestine, Somalia, Sudan, Syrian Arab Republic and Yemen

The main objectives of the group exercises were to exchange ideas on situation assessment and programme planning, generate current data on eye care from the member countries on a standard format that could be used to develop a regional database, and seek the input of the groups to develop regional strategies and recommendations for implementation of VISION 2020 within the Region. It was decided that in view of the limited time, the group exercises would not focus on developing country plans. In the group work, the participants discussed issues of resource and needs assessment, strategies for infrastructure and human resource development, equipment needs and programme planning.

*Priority countries*

The Region has marked variation in the socioeconomic conditions, human development indices, and geo-political situation and this diversity is observed in many areas including service delivery, human resources, and infrastructure. However, the group noted that while there were intra-regional differences, certain countries were identified as high priority, e.g. Afghanistan, Djibouti, Iraq, Palestine, Somalia, Sudan and Yemen requiring urgent support for intervention and implementation of VISION 2020 programmes.

*VISION 2020 national plan*

The country representatives and delegates recognized the requirements for member countries stated in the Resolution on Elimination of Avoidable Blindness (WHA.56.26) adopted by the World Health Assembly in May 2003.

The countries are requested to set up their national VISION 2020 Plan no later than 2005 and to commence implementation of such plans by 2007 at the latest. The countries will be required to update WHO on their achievements in blindness control for reporting to the 59th World Health Assembly in 2006.

*VISION 2020 plan preparation*

The group noted that paucity of reliable information was a major constraint in national programme planning and therefore recommended that countries within the Region should endeavour to update their existing information on the major causes of visual impairment and blindness, and the current status of the eye health care services provided and develop national data centres for collation, analysis and reporting of information related to eye care. For this purpose, standardized formats may be used in which the source of information is clearly indicated i.e. whether it is from population based surveys, rapid assessments, situation analyses, extrapolations from other countries or hospital based data. An effort should be made to obtain information on the quantum of services provided by NGOs and the private sector.

It was recognized that for planning purposes, it was necessary to consider a unit of population. The members recommended that national programmes adopt a district focus strategy and use a district comprehensive eye care model for planning and implementation.

During the deliberations, it was noted that many countries had well developed tertiary eye care services, some had good secondary level services, but there was little or no existence of primary eye care. The group stressed the need for member countries to focus on development of primary eye care as a priority and its integration within existing primary health care programmes.

During the deliberations, the members expressed concern that the incurably blind (children and adults) were often missed when national eye care plans were formulated. There was a need for a holistic approach to service provision and as such cross referral and networking between different service providers (eye care, education, rehabilitation) needed to be promoted. It was therefore recommended that national VISION 2020 plans seek to strengthen linkages between eye care, education and rehabilitation services particularly in the context of district comprehensive eye services.

In recent years, significant developments have taken place in planning for eye care under the auspices of WHO and IAPB. These include development of a 'Toolkit' for formulating national plans for VISION 2020, operational guidelines for development of refractive services, standard lists of equipment for district level eye care services, low vision services at primary, secondary and tertiary levels, and for development of child eye care centres. The group recommended that the CD-ROM "Developing an Action Plan to prevent blindness at national, provincial and district levels" be used for preparing national VISION 2020 plans.

The Vision 2020 national plan comprises specific areas of eye health care services: a) service delivery and disease control; b) human resource development; c) infrastructure and appropriate technology; d) advocacy and awareness; and e) monitoring and evaluation.

a) Service delivery and disease control

There is a great and urgent need to expand access to eye care services in some of the countries especially Afghanistan, Djibouti, Iraq, Palestine, Somalia, Sudan and Yemen. According to available information, the geographical coverage of eye care services is disproportionate with maximum services in the major cities and inadequate facilities at the secondary and primary levels. The group therefore recommended that priority be given to strengthening the secondary and primary level eye care services together with the referral network within the primary-secondary complex.

The group members noted that the priority diseases for VISION 2020 within the region had marked sub regional variation and

included cataract, corneal opacity, refractive errors and low vision, childhood blindness (including vitamin A deficiency), glaucoma, diabetes related blindness, trachoma, onchocerciasis and trauma. The group appreciated the efforts of WHO and the international agencies in control of blinding trachoma which was expected to be eliminated from Morocco, Oman and Saudi Arabia within the next few years. The group recommended that efforts be intensified in the remaining trachoma endemic countries for its elimination.

Control of childhood blindness was recognized as a universal priority within all the regional countries. The group recommended that child eye care be incorporated in primary eye care and the ten key messages below recommended by WHO be included in the curriculum of primary health and in any training programme.

- Clean eyes and apply antibiotic eye ointment at birth
- Prophylactic vitamin A to mothers after birth
- Promote breastfeeding and nutrition
- Immunization against measles
- Prophylactic vitamin A to children with measles/under nutrition/acute infections
- Keep the face clean
- Early referral of child with suspicious vision or other abnormalities
- Child with a red eye/injury to be referred immediately
- Refer in case of a white pupil or abnormality
- Do not use traditional medicines in the eye

The group further recommended that district comprehensive eye care programmes seek to strengthen primary level prevention of childhood blindness and promote linkage with child health programmes such as maternal and child health, Integrated Management of Child Health and immunization programmes. The group stressed the need to obtain more information on retinopathy of prematurity particularly in countries where neonatal services were well developed and endorsed and appreciated the efforts of WHO and Lions Sight First to establish five child eye care centres in the Region.

During the deliberations and discussions, it was apparent that cataract accounted for about 60% of blindness in countries and there was still a considerable backlog. However, the group recommended that national VISION 2020 plans, while addressing the issue of increasing output and improving outcome in cataract control programmes, also needed to focus beyond cataract to other major causes of blindness in respective countries.

Diabetes mellitus was noted to have a high prevalence in the Region and diabetes related blindness was recognized as a rapidly emerging priority for many countries within the region. The group recommended that sound evidence-based data be obtained from countries so that a consultation process can be initiated with a view to developing strategies for its control within the Region.

Scarcity of refractive and low vision services within the Region were noted with great concern particularly in the context of the emerging burden of noncommunicable blinding diseases and the ageing population. The group recommended that development of refractive and low vision services was a priority for the Region and efforts should be made to ensure their inclusion in national programme planning for VISION 2020.

The group recognized that in some countries, blindness control programmes had developed as vertical programmes, e.g. onchocerciasis and trachoma, and recommended that such countries should endeavour to integrate these programmes into their national Vision 2020 plans.

It was stressed by the group that while planning for development of eye care services, equity, gender, and social justice need to be ensured where possible. The group members also stressed efforts to make eye care services sustainable where feasible.

b) Human resource development

The issue of adequate human resources, their distribution and utilization for eye care delivery presented complex issues. In some countries there were large numbers of ophthalmologists available, while some countries had very few. Most countries had indigenous training programmes, while other countries had to rely on



expatriates. The group recommended that countries of the Region should assist each other in developing their essential human resources in eye care.

The group emphasized that countries need to determine their human resource requirements based on VISION 2020 targets and explore educational and training opportunities sub-regionally and regionally.

The success of national eye care programmes depends greatly on having eye care teams with particular reference to midlevel eye care personnel. It was noted with concern that there was a general paucity of midlevel eye care personnel within countries and their involvement was recognized as a regional priority. The members stressed the need for countries of the Region to adopt an eye care team approach. They further recommended that national VISION 2020 plans address the issue of midlevel eye care personnel and develop strategies for their training and deployment.

c) Infrastructure and appropriate technology

The availability of equipment and infrastructure again varied greatly within the countries represented. The group recommended that as part of national VISION 2020 plans, member countries undertake a situation analysis of infrastructure and equipment available within the service centres. The gaps identified would help in determining needs, setting priorities and exploring resource options.

The group noted that in some countries optical services, particularly dispensing of spectacles were limited by the high cost of spectacles and the scarcity of services. The group members recommended that national VISION 2020 plans in these countries seek to develop appropriate and affordable optical services.

d) Advocacy and awareness

Lack of awareness of the socioeconomic implications of blindness by policy makers, health planners and professionals is a major constraint in implementation of VISION 2020. The members of the group recommended that national VISION 2020 plans develop

advocacy strategies to raise awareness to create an enabling environment for the delivery eye health care.

During the deliberations, the representatives of member countries noted that one of the causes of poor uptake of services was lack of awareness by the community. The group therefore recommended that national VISION 2020 plans incorporate public health education and awareness on eye care.

e) Monitoring and evaluation

The group recognized that monitoring and evaluation were key elements of any VISION 2020 plan. In this regard, the members recommended that monitoring and evaluation be part of planned programme development.

The countries are advised to follow “A framework and Indicators for Monitoring VISION 2020 – The Right to Sight”, published by WHO, when designing a list of indicators for VISION 2020 programmes. The group further emphasized that quality monitoring of medical and surgical interventions, such as cataract surgical outcome, needs to be enhanced.

The elaboration of national action plans for VISION 2020 should include proper costing of needed services and facilities; nongovernmental organizations and other interested parties should actively participate in, and support this planning and subsequent implementation.

*Nongovernmental organizations*

The group noted that while eye health care services were provided by government facilities in countries, a significant contribution was made by nongovernmental organizations (NGOs) towards eye health care service delivery, infrastructure and human resource development. The members of the group expressed their deep appreciation to the NGOs working in the Region and acknowledged their invaluable contribution and commitment.

The group recommended that public–NGO–private partnerships for VISION 2020 programmes needed to be encouraged in the countries of the Region.

*Regional support*

Blindness is both a disability and a socioeconomic challenge and requires concerted efforts at regional and country levels for its recognition as a priority on regional and national health agendas in view of the growing and ageing populations. In this regard, the group emphasized that the Regional Office had a pivotal role to play in advocacy for VISION 2020 and for providing technical support to member countries to develop and implement VISION 2020 programmes and for promoting technical cooperation among developing countries within the region.

The group noted that alleviation of blindness was also an important development issue and as such needed to be integrated with development work. It recommended that there was a need for the Region to explore means and ways to integrate blindness control and rehabilitation of the blind in ongoing development programmes.

In order to facilitate and promote VISION 2020 within the Region, the members suggested that the Regional Office consider establishing a permanent position of regional adviser for blindness control and prevention to ensure continued provision of technical support to countries.

The group members agreed that there was a need for managers of national eye care programmes to have an orientation in public health ophthalmology and recommended that the Region should introduce a short training programme for national programme managers to be trained in blindness prevention and eye care programme management.

The group appreciated that there was considerable benefit in cross-regional interaction in catalysing development of VISION 2020 programmes. It therefore recommended that a regional coordination group be formed to follow up and facilitate the implementation of the recommendations.