
Prevention of avoidable blindness and visual impairment

Report by the Secretariat

1. The Fifty-ninth World Health Assembly, in resolution WHA59.25 on elimination of avoidable blindness, requested the Director-General “to monitor progress in the Global Initiative for the Elimination of Avoidable Blindness in collaboration with international partners, and to report to the Executive Board every three years”. Prevention of visual impairment including blindness¹ is included in the amended Medium-term strategic plan 2008–2013 under strategic objective 3² and in the Programme budget 2008–2009. During the Sixty-first World Health Assembly, the Secretariat was asked to prepare an action plan for the prevention of avoidable blindness, in the context of the action plan for the global strategy for the prevention and control of noncommunicable disease, for submission to the Executive Board.³

2. The causes and magnitude of blindness and visual impairment need to be determined before appropriate strategies can be developed and international alliances for the prevention of blindness alliances established. The first comprehensive global reports on the causes and magnitude of the conditions, which were published in the 1990s, indicated that up to 80% of blindness in the world was preventable or treatable. In 1999, the global initiative “VISION 2020: the Right to Sight” was established as a partnership between WHO and the International Agency for the Prevention of Blindness with the aim of eliminating avoidable blindness. This initiative has promoted WHO’s strategy for the prevention of avoidable blindness and visual impairment, which is based on disease control, human resource development, and infrastructure and technology. In order to introduce this strategy in countries, the Health Assembly, in resolution WHA56.26, urged Member States to establish national VISION 2020 committees on eye health and prevention of blindness. The Secretariat and the regional coordinating offices of the International Agency for the Prevention of Blindness supported Member States in implementing and periodically monitoring and assessing their national and subnational VISION 2020 plans for eye health and prevention of blindness.

¹ “Blindness” is defined as a presenting visual acuity of less than 3/60, or a corresponding visual field loss to less than 10°, in the better eye with the available correction. “Severe visual impairment” is defined as a presenting visual acuity of between less than 6/60 and 3/60 and “moderate visual impairment” as a presenting visual acuity of less than 6/18 to 6/60. In this document “visual impairment” includes both severe and moderate visual impairment.

² To prevent and reduce disease, disability and premature death from chronic noncommunicable conditions, mental disorders, violence and injuries and visual impairment.

³ Document WHA61/2008/REC/3, summary record of the eighth meeting of Committee A.

3. Continued systematic collection of epidemiological data on blindness and visual impairment enabled WHO to publish more detailed statistics in 2004 and 2006. Currently, about 314 million people worldwide live with visual impairment due to either eye diseases or uncorrected refractive errors. Of these, 45 million people are blind, 90% of whom live in low-income countries, and the major causes are cataract (39%), uncorrected refractive errors (18%), glaucoma (10%), age-related macular degeneration (7%), diabetic retinopathy (4%), trachoma (3%), paediatric eye conditions (3%), and onchocerciasis (0.7%). To date, epidemiological surveys have been conducted in 65 countries but, in order to determine the measures necessary to improve eye health, more epidemiological data must be gathered, specifically from the countries where no data are available.

4. By September 2008, 118 Member States had reported the establishment of a national VISION 2020 committee on eye health and prevention of blindness and 104 Member States had reported having a national VISION 2020 plan, as urged in resolutions WHA56.26 and WHA59.25. By the same date, 150 Member States had held national and subnational workshops, organized jointly by national committees in collaboration with the Secretariat and international partners. These workshops provided an opportunity for sharing knowledge and international experience on community eye health and for facilitating needs analyses and the development of national and subnational plans.

5. Low-income and middle-income countries with a well-developed comprehensive national plan containing clearly specified time-linked and measurable targets and indicators have substantially improved the provision of eye health-care services. Proper allocation of resources to cost-effective eye-care interventions accelerates improvement of eye-care services beyond the standard that would be otherwise determined exclusively by the country's gradual socioeconomic growth. However, because of lack of resources and leadership, some countries have made only slow or fragmented progress and their plans for eye health and national prevention of blindness have not yielded tangible improvements in the provision of eye-care services. It is necessary to ensure that the implementation phase of national plans is adequately managed and is actively supported by the national committees on eye health and prevention of blindness.

6. Despite significant progress in the introduction and development of national plans and committees, in many countries and communities the prevalence of avoidable blindness remains unacceptably high. Strong international partnerships have been instrumental in convincing international and domestic donors¹ to support activities on the prevention of blindness activities. Achievements have been made, but substantial shortfalls in the resources available for putting national agendas for eye health and prevention of blindness have been identified.

7. The Secretariat has drafted an action plan for the prevention of avoidable blindness and visual impairment after consultation with Member States and international partners. It was published on the WHO web site on 19 September 2008 for public review and comment. Representatives of Permanent Missions to the United Nations Office and other International Organizations in Geneva, also invited to review and comment on the draft action plan, gave positive and constructive feedback at an informal consultation (Geneva, 3 October 2008).

¹ For instance, the African Programme for Onchocerciasis Control, the Onchocerciasis Elimination Program for the Americas, the WHO Alliance for the Global Elimination of Blinding Trachoma and VISION 2020: the Right to Sight.

8. The draft action plan for the prevention of blindness and visual impairment, which is annexed to this report, sets out current experience, draws on the recognized achievements and deals with gaps in implementing prevention of blindness activities over the past decades. It was designed to provide ways for achieving the Organization-wide expected results for prevention of blindness set out in the Medium-term strategic plan 2008–2013 by expanding the work of Member States, the Secretariat and international partners through the development of comprehensive eye-health programmes at national and subnational levels. The draft plan has five objectives, with three sets of recommendations for actions under each objective, for Member States, the Secretariat and international partners, in order to guide their work on the prevention of avoidable blindness and visual impairment at national, regional and global levels. Its time span covers the remaining period of the Medium-term strategic plan, i.e. 2009–2013. Since blinding conditions are chronic and mostly due to noncommunicable causes, this plan complements the action plan for the global strategy for the prevention and control of noncommunicable diseases adopted by the Health Assembly in resolution WHA61.14.

ACTION BY THE EXECUTIVE BOARD

9. The Board is invited to note this report and to consider the draft action plan.

ANNEX

**DRAFT ACTION PLAN FOR THE PREVENTION OF AVOIDABLE
BLINDNESS AND VISUAL IMPAIRMENT**

1. According to the latest WHO estimates, about 314 million people worldwide live with visual impairment due to either eye diseases or uncorrected refractive errors. Of these, 45 million are blind, of whom 90% live in low-income countries. The major causes of blindness are cataract (39%), uncorrected refractive errors (18%), glaucoma (10%), age-related macular degeneration (7%), diabetic retinopathy (4%), trachoma (3%), eye conditions in children (3%), and onchocerciasis (0.7%). The actual magnitude of blindness and visual impairment is likely to be higher than estimates indicate, as detailed epidemiological information on some causes (e.g. presbyopia) is still lacking.
2. With today's knowledge and technology, up to 80% of global blindness is preventable or treatable. Cost-effective interventions are available for the major causes of avoidable blindness. Major international partnerships have been established in recent years, including the African Programme for Onchocerciasis Control, the Onchocerciasis Elimination Program for the Americas, the WHO Alliance for the Global Elimination of Blinding Trachoma and VISION 2020: the Right to Sight.
3. Two recently adopted Health Assembly resolutions (WHA56.26 and WHA59.25) focused on avoidable blindness and visual impairment, urging Member States to work on prevention, mainly through specific plans and inclusion of the subject in national health plans and programmes. Despite significant progress in the area of eye health, the prevalence of avoidable blindness remains unacceptably high in many countries and communities.

PURPOSE

4. The plan aims to expand efforts by Member States, the Secretariat and international partners in preventing blindness and visual impairment by developing comprehensive eye-health programmes at national and subnational levels.
5. In order to intensify and coordinate existing activities, especially in low- and middle-income countries, the plan seeks to:
 - (a) increase political and financial commitment to eliminating avoidable blindness;
 - (b) facilitate the preparation of evidence-based standards and guidelines for cost-effective interventions;
 - (c) review international experience and share lessons learnt and best practices in implementing policies, plans and programmes for the prevention of blindness and visual impairment;
 - (d) strengthen partnerships and coordination between stakeholders involved in preventing avoidable blindness;

- (e) collect, analyse and disseminate information systematically on trends and progress made in preventing avoidable blindness globally, regionally and nationally.

SCOPE

6. This plan focuses on the major causes of avoidable blindness and severe and moderate visual impairment, as defined in the draft eleventh revision of the International Classification of Diseases.¹ The plan does not deal with categories of milder visual impairment or eye conditions for which evidence-based prevention and/or treatment interventions are not available; these cases will require effective and appropriate rehabilitation measures that enable people with disabilities to attain and maintain maximum independence and full inclusion and participation in all aspects of life.

7. Since blinding conditions are chronic and mostly due to noncommunicable causes, this plan complements the action plan for the global strategy for the prevention and control of noncommunicable diseases adopted by the Health Assembly in resolution WHA61.14. Prevention strategies differ significantly, however, as most blinding conditions do not share the risk factors, other than tobacco use, addressed in the noncommunicable disease plan. Although, as with noncommunicable diseases, primary health-care and community-based interventions are essential for preventing blindness and visual impairment, the provision of high-quality eye-care services needs specific skills, technology and infrastructure.

8. Evidence indicates that the magnitude of avoidable blindness caused by communicable diseases like trachoma and onchocerciasis and ophthalmological complications in measles is decreasing, whereas noncommunicable age-related eye conditions (e.g. cataract, glaucoma and diabetic retinopathy) are increasing. Programmes against both onchocerciasis and trachoma need continued efforts for control and to avoid recurrence. A coordinated intersectoral approach to both communicable and noncommunicable conditions is needed.

RELATION TO EXISTING STRATEGIES AND PLANS

9. Prevention of avoidable blindness and visual impairment has been the subject of several resolutions adopted by the Health Assembly,² which, inter alia, encouraged several international partnerships and alliances to work at the global level in this field. The action plan supports implementation of WHO's Eleventh General Programme of Work 2008–2013 and the Medium-term strategic plan 2008–2013, particularly strategic objective 3, which covers work on prevention and

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² Resolutions WHA22.29, WHA25.55, WHA28.54, WHA47.32, WHA51.11, WHA56.26 on Elimination of avoidable blindness and WHA59.25 on Prevention of avoidable blindness and visual impairment.

control of avoidable blindness and visual impairment. It also supports the implementation of existing regional resolutions and plans.¹

RESOURCES

10. The Programme budget 2008–2009 describes the financial resources required by the Secretariat for work to meet strategic objective 3. For future bienniums, additional resources will be required. Further progress in preventing avoidable blindness and visual impairment globally, regionally and nationally will depend on the amount of additional resources available. All partners – including intergovernmental and nongovernmental organizations, academic and research institutions and the private sector – will need to do more for resource mobilization at all levels.

TIME FRAME

11. This action plan is designed to cover the period 2009–2013, that is, the remaining six years of the Medium-term strategic plan.

SITUATION ANALYSIS

Magnitude, causes and impact of blindness and visual impairment

12. Determining the causes and magnitude of blindness is necessary for setting priorities, designing targeted strategies and establishing international blindness-prevention alliances. Recent years have seen much better availability of data on the causes and magnitude of blindness and visual impairment around the world. In the past, surveys on the causes used a variety of methods and definitions, but WHO's development of standardized and feasible methodologies has facilitated collection from Member States of comparable epidemiological and health-system data, for example on the rapid assessment of surgical services for cataract and of avoidable blindness. The childhood blindness protocol is another example of such progress.

13. To date, epidemiological surveys have been conducted in 65 countries. However, the absence of surveys and lack of data in the remaining countries have greatly hampered detailed planning, monitoring and evaluation of interventions. In addition, missing epidemiological data on the status of visual health in the population limits further analysis of the trends of visual impairment and the timely development of appropriate public health interventions.

14. Collection of reliable and standardized epidemiological data is a priority for countries where such data are not available. Action is also needed to develop modelling approaches in order to determine trends and set targets, so that the planning of efforts to prevent avoidable blindness and visual impairment can be more focused and evidence-based. Also required is an improved mechanism

¹ See resolution EM/RC49/R.6 on VISION 2020: The Right to Sight – elimination of avoidable blindness, resolution EM/RC52/R.3 on Prevention of avoidable blindness and visual impairment, document AFR/RC57/6 (Accelerating the elimination of avoidable blindness – a strategy for the WHO African Region) and PAHO: Draft Ocular Health Strategy and Plan of Action 2008–2012.

for systematically collecting standardized information on human resources, infrastructure and available technologies, and countries must be ready to respond to the observed needs.

Prevention of blindness and visual impairment as part of national health development plans and WHO technical collaboration with Member States

15. Despite the availability of much WHO information on the magnitude and causes of blindness and strategies for their prevention, policy-makers and health providers in many countries are evidently not fully aware of available eye-care interventions, their cost-effectiveness and their potential to prevent or treat the 80% of global blindness that is avoidable. Country cooperation strategies reflect the agreed joint agenda between health ministries and WHO. So far, the inclusion of blindness prevention in such documents has been minimal, despite seven resolutions of the Health Assembly relating to prevention of avoidable blindness and visual impairment, the existence of WHO's major, long-standing international partnerships on prevention of blindness, and major successes in reducing avoidable blindness, such as WHO's Onchocerciasis Control Programme. Lack of adequate resources for preventing blindness at the country level is a major impediment. Additionally, faced with increasingly limited resources, donor and recipient countries often give higher priority to mortality-related disease control programmes than to those dealing with problems of disability. Also, experienced staff to coordinate blindness-prevention activities at the regional and country levels are in short supply.

16. Greater priority should be given to preventing blindness in health development plans and country cooperation strategies. Action is also needed to strengthen technical support and enhance the provision of expert advice to Member States where blindness and visual impairment are a major health problem.

National eye health and prevention of blindness committees

17. It is important to establish national committees and programmes for eye health and blindness prevention. Their role is to liaise with all key domestic and international partners, to share information and to coordinate such activities as implementing the national eye health and blindness-prevention plan. A functional national committee is a prerequisite for developing the national blindness-prevention plan and its implementation, monitoring and periodic assessment. Some countries, particularly those with decentralized or federated management structures, have similar committees at subnational level.

18. By October 2008, 118 Member States had reported the establishment of a national committee. However, not all national committees are functional and, unfortunately, in many cases such committees have not successfully initiated effective action. In some instances, selected individuals, often dedicated eye-care professionals, are relied on to provide leadership and serve as the driving force for blindness-prevention plans and programmes. The committees' membership is often not uniform, ranging from the ideal scenario, in which all key partners are represented (including the national health-care authorities), to a minimal group of dedicated eye-care professionals.

National eye health and prevention of blindness plans

19. Experience has shown that, in low- and middle-income countries, a comprehensive national plan containing targets and indicators that are clearly specified, time-linked and measurable leads to substantially improved provision of eye health-care services.

20. Most low- and middle-income countries (104 Member States by October 2008) have reported the development of national eye health and blindness-prevention plans, but reporting on and assessment of their implementation and impact have been insufficient. Some national plans do not include measurable targets, an implementation timeline and adequate tools for monitoring and evaluation. In some countries, the plans have only been partially implemented. In addition, because of lack of resources and leadership, some countries have made only slow or fragmented progress and their plans for eye health and national prevention of blindness have not yielded tangible improvements in the provision of eye-care services. It is necessary to ensure that the implementation phase of national plans is well managed, and a standardized approach to monitoring and evaluation of national and subnational eye health and blindness-prevention plans must be taken.

WHO's strategies for prevention of blindness and visual impairment and provision of technical support

21. WHO's strategy for the prevention of avoidable blindness and visual impairment is based on three core elements: disease control, human resource development, and infrastructure and technology. This approach has been promoted since 1999 by the global initiative "VISION 2020: the Right to Sight", which was established as a partnership between WHO and the International Agency for the Prevention of Blindness. The past decade has seen major progress in the development and implementation of WHO's approaches to controlling communicable causes of blindness and visual impairment. Achievements in controlling onchocerciasis and trachoma were based on implementation of WHO's strategies of community-directed treatment with ivermectin and the SAFE strategy for trachoma control, and their adoption by Member States and international partners. This unified approach facilitated preventive efforts aimed at millions of individuals at risk of visual loss, and convinced major donors that long-term commitment is required.

22. Subsequently, major shifts in the pattern of causes of blindness have been documented, with a declining trend for the communicable causes and a progressive increase in age-related chronic eye conditions. Public health interventions for some of the major conditions such as cataract and diabetic retinopathy have been systematically reviewed and respective WHO recommendations have been formulated. Strategies are needed to control other conditions such as glaucoma.

23. By October 2008, 150 Member States have held national or subnational VISION 2020 workshops to introduce WHO's strategies for eye health. These workshops were the platform for sharing expertise about community eye health and facilitated the process of needs assessment and subsequent formulation of national and subnational blindness-prevention plans.

Prevention of avoidable blindness and visual impairment as a global health issue

24. Reliable epidemiological data and the availability of cost-effective interventions for the control of most of the major causes of avoidable blindness have demonstrated the importance of strengthening national initiatives in preserving eye health. In resolutions WHA56.26 and WHA59.25, the Health Assembly recommended a unified approach to blindness-prevention activities, urging Member States to establish national committees, to set up national blindness-prevention plans, and to devise strong monitoring and evaluation mechanisms for their implementation. In addition, it has been recognized that advocacy for preventing visual loss needs to reach a wider audience, and that the importance of preserving eye health needs to be further promoted in the public health domain and the community.

25. In some countries the impact of Health Assembly resolutions on allocation of new resources for development and implementation of blindness-prevention plans has fallen short of expectations. In

most countries action is slow and progress in implementing adequate blindness-prevention activities is limited.

26. Plans and programmes on blindness prevention exist at global level and in some cases at regional level, but action is now required to provide support to Member States in applying international experience and scientific evidence in order to develop and implement their own blindness-prevention measures. Further action is required to integrate the eye-health agenda and its impact on poverty alleviation in the overall development agenda.

International partnerships

27. Over the past decade, major international partnerships have been forged to assist WHO in providing support to Member States in their efforts to prevent blindness, such as “VISION 2020: the Right to Sight”. The partnerships have made substantial progress, mostly in combating infectious causes of blindness. They have also encouraged and supported long-term resource mobilization, including donation programmes (e.g. the Merck donation programme for ivermectin to control onchocerciasis, and distribution of azithromycin under a donation programme by Pfizer to control trachoma). Global partnerships have united and substantially strengthened the key international stakeholders in their action to prevent blindness, using WHO disease control strategies.

28. Coordination and timely evaluation of work undertaken by international partners is required so that their approaches are aligned with other activities in the area of blindness prevention. Despite some notable improvements in collecting data on blindness-prevention activities at the country and subnational levels, consolidated reporting remains limited. One reason is the weakness of many countries’ monitoring systems, another being the limited information sharing and exchange between countries and their international partners.

29. The action now required is to improve coordination and information exchange between all stakeholders.

Human resources and infrastructure

30. Despite efforts to strengthen human resources for eye health, a crucial shortage of eye-care personnel persists in many low-income countries. Many countries in the African Region, for instance, have less than one ophthalmologist per million inhabitants. In addition, the existing human resources are often concentrated in larger urban agglomerations, leaving the rural areas with a poor or non-existent service. Furthermore, well-trained personnel leave low-paid positions in many of the public and university health-care establishments, seeking work in the domestic private health-care sector or even work opportunities abroad. It is thus the poorest areas of low-income countries that are most seriously disadvantaged by a suboptimal workforce beset by shortages, low productivity and uneven distribution.

31. Although recent technological developments in eye care have resulted in advanced methods of diagnostics and treatment, the cost of properly equipping a secondary and/or tertiary eye-care centre is prohibitive for many low-income countries.

32. Urgent action is required within countries to train more eye-health personnel and redress the distribution of the available workforce between urban and rural areas.

Resource mobilization

33. Strong international partnerships have been instrumental in convincing international and domestic donors to support blindness-prevention activities (e.g. the African Programme for Onchocerciasis Control, the Onchocerciasis Elimination Program for the Americas, the WHO Alliance for the Global Elimination of Blinding Trachoma, and “VISION 2020: the Right to Sight”). Despite these disease-specific achievements, there have been major shortfalls in the resources available for national programmes of eye health and blindness prevention. Moreover, the potential for generating additional international and domestic resources has not been fully explored. The lack of adequate resources for blindness prevention and visual impairment activities could seriously jeopardize advances in eye-health care.

34. The action now required is to review the current approaches to financing eye-health systems, highlight the socioeconomic impact of blindness, the cost-effectiveness of eye-health interventions, and the financial benefits of early prevention of blindness and visual impairment.

Integration of eye health into broad development plans

35. The creation of comprehensive, integrated health services and sharing of resources and infrastructure will be facilitated by incorporating eye health in broader intersectoral development plans. An added value was recorded in countries where prevention of blindness was integrated into the broader health development plans and/or socioeconomic development programmes.

36. Despite reported links between visual impairment and decreased socioeconomic opportunities for the affected individuals, prevention of blindness has not been sufficiently addressed in many major international and domestic development agendas. There has been insufficient research on the impact of blindness in various socioeconomic settings as well as on limitations of access to eye care for low-income groups, and the action now required is to promote further research in these areas.

OBJECTIVES AND ACTION

OBJECTIVE 1. Strengthen advocacy to increase Member States’ political, financial and technical commitment in order to eliminate avoidable blindness and visual impairment

37. International advocacy for the preservation of visual health aims to increase awareness of current blindness-prevention plans, especially the cost-effective interventions available and international experience in their implementation. This advocacy effort should target health-care professionals and policy-makers in order to encourage the intersectoral action needed to improve eye health-care systems and incorporate eye health in broader health-care and development plans. It should also target potential donors and those who set research priorities and funding levels so as to accumulate evidence on prevention of blindness and visual impairment and their impact.

38. Further research is needed on the impact of risk factors such as smoking, ultraviolet radiation and lack of hygiene. Inequities in access to eye-care services also need to be further researched.

39. Special attention should be paid to raising public awareness and finding appropriate ways of communicating information on prevention of visual loss and ways of treating eye conditions.

Proposed action for Member States

40. Establish and support national coordinators posts for eye health and prevention of blindness at health ministries and other key institutions, as appropriate.
41. Earmark specific budgetary appropriations for eye health and prevention of blindness.
42. Promote and integrate eye health at all levels of health-care delivery.
43. Observe World Sight Day.
44. Integrate eye-health preservation in health promotion agendas.

Action for the Secretariat

45. Conduct political analyses to determine the best way of securing support of high-level decision-makers and their commitment to promoting eye health, and explore the potential impact and ways of integrating blindness prevention in socioeconomic policies and programmes [2009–2011].
46. Make policy-makers aware of the relationship between eye diseases, gender, poverty and development, using evidence-based information and epidemiological data and take forward the work on social determinants of health as it relates to eye-health problems [2009–2010].
47. Harmonize the advocacy messages used by international partners in various health and development forums [2009–2010].
48. Promote collaboration by programmes and groups across the Organization in work on tackling major risk factors for visual impairment.

Proposed action for international partners

49. Support WHO in involving all stakeholders in advocacy in order to raise awareness of the magnitude of blindness and visual impairment, the availability of cost-effective interventions, and international experience in applying them.
50. Support Member States in establishing forums where key stakeholders – including nongovernmental organizations, professional associations, academia, research institutions and the private sector – can agree on concerted action against avoidable blindness and visual impairment.

OBJECTIVE 2. Develop and strengthen national policies, plans and programmes for eye health and prevention of blindness and visual impairment

51. National policies, plans and programmes for eye health and prevention of avoidable blindness and visual impairment are essential instruments for coordinated, evidence-based, cost-effective, sustainable interventions. Integration of eye health into relevant national health policies, including those relating to school and occupational health, facilitates a coordinated multidisciplinary approach and development of comprehensive eye care.

52. Evidence-based WHO strategies for tackling several main causes of avoidable blindness and visual impairment have been designed in order to support the formulation of policies and programmes. Some strategies are already in place for the control of trachoma, onchocerciasis, vitamin A deficiency, diabetic retinopathy and some aspects of cataract-related visual loss, but strategies for emerging major causes of visual loss need to be developed.

Proposed action for Member States

53. Where sufficient capacity exists, develop national strategies and corresponding guidelines for the prevention of blindness and visual impairment; otherwise consider adapting those recommended by WHO.

54. Review existing policies addressing visual health, identify gaps and develop new policies in favour of a comprehensive eye-care system.

55. Incorporate prevention of blindness and visual impairment in poverty-reduction strategies and relevant socioeconomic policies.

56. Involve relevant government sectors in designing and implementing policies, plans and programmes to prevent blindness and visual impairment.

57. Develop an eye-health workforce through training programmes that include a community eye-health component.

Action for the Secretariat

58. Review the experience of public health strategies for the control of uncorrected refractive errors including presbyopia, glaucoma, age-related macular degeneration, hereditary eye disease, and selected eye conditions in children [2009–2011].

59. Facilitate establishment and activities of eye health and national blindness-prevention committees, advise Member States on their composition, role and function, and provide direct technical support for developing, implementing and evaluating national plans.

60. Develop a coordinated and standardized approach to the collection, analysis and dissemination of information on the implementation of national eye health-related policies, best practices in the public health aspects of blindness prevention, including information on the available health insurance systems, and their impact on the various aspects of eye-care provision [2009–2011].

61. Promote collaboration with other major programmes and partnerships (e.g. the WHO Global Health Workforce Alliance) to promote the development of human resources for eye-care provision at primary, secondary and tertiary levels [2009–2010].

62. Review educational curricula and best practices for education and training of eye health-care professionals [2010–2011].

63. Strengthen the capacity of regional and country offices to provide technical support for eye health/prevention of blindness.

Proposed action for international partners

64. Promote WHO-recommended strategies and guidelines for prevention of blindness and visual impairment, and contribute to the collection of national information on their implementation.
65. Generate resources and coordinate support for the implementation of national blindness-prevention plans in order to avoid duplication of effort.
66. Provide continued support to programmes controlling nutritional and communicable causes of blindness.

OBJECTIVE 3. Increase and expand research for the prevention of blindness and visual impairment

67. Public-health action to prevent blindness and visual impairment needs to be evidence-based and cost-effective. International collaboration in promoting multidimensional and multisectoral research is essential for developing eye-care systems that are comprehensive, integrated, equitable, high-quality and sustainable. Further research is needed on ways to capitalize on available evidence. Special emphasis should be placed on evaluating interventions and different strategies for early detection and screening of the causes of blindness and visual impairment in different population groups.

Proposed action for Member States

68. Promote research by national research institutions on socioeconomic determinants, the role of gender, the cost-effectiveness of interventions, and identification of high-risk population groups.
69. Assess the economic cost of blindness and visual impairment and its impact on socioeconomic development.
70. Determine the impact of poverty and other determinants on the gradient of socioeconomic disparity in individuals' access to eye-care services.
71. Include epidemiological, behavioural, and health-system research as part of national programmes for eye health and prevention of blindness and visual impairment.

Action for the Secretariat

72. Collate, in collaboration with other partners, existing data on risk factors, such as smoking, unhealthy diet, physical inactivity, ultraviolet radiation and lack of hygiene, and coordinate the development of a prioritized research agenda related to the causes and prevention of blindness with special emphasis on low- and middle-income countries [2009–2011].
73. Support Member States in assessing the impact of public health policies and strategies on the status of eye health and share the results.
74. Facilitate development of projection models on trends in the causes and magnitude of blindness and visual impairment and prioritize development of, and target setting for, eye-care systems [2010–2011].

Proposed action for international partners

75. Support low- and middle-income countries in building capacity for epidemiological and health systems research, including the analytical and operational research required for programme implementation and evaluation in the area of eye disease.
76. Support collaboration between institutions in low- and middle-income countries and high-income countries.
77. Support and prioritize jointly research on eye diseases at the global, regional and subregional levels.
78. Strengthen and support WHO Collaborating Centres and national research institutions in research related to prevention of blindness and visual impairment.

OBJECTIVE 4. Improve coordination between partnerships and stakeholders at national and international levels for the prevention of blindness and visual impairment

79. Large international partnerships and alliances have been instrumental in developing effective public health responses for the prevention of blindness and visual impairment. Member States, United Nations agencies, other international institutions, academia, research centres, professional health-care organizations, nongovernmental organizations, service organizations, civil society and the corporate sector are key stakeholders in this process. The challenges are to strengthen global and regional partnerships and to incorporate the prevention of blindness into broader development initiatives that include efforts to establish new intersectoral forms of collaboration and alliances.

Proposed action for Member States

80. Participate in and actively support existing national and international partnerships and alliances for the prevention of avoidable blindness and visual impairment, including coordination with noncommunicable disease control programmes and neglected tropical disease prevention and control.
81. Promote partnerships between the public, private and voluntary sectors at national and subnational levels.

Action for the Secretariat

82. Convene the WHO Monitoring Committee for the Elimination of Avoidable Blindness pursuant to resolution WHA56.26 [2009].
83. Support and strengthen the role of WHO Collaborating Centres by linking their work plans to the implementation of this plan [2009–2010].

Proposed action for international partners

84. Collaborate closely with and provide support to Member States and the Secretariat in implementing the various components of this plan.

85. Liaise with other international organizations and agencies with broader development agendas in order to identify opportunities for collaboration.

86. Continue to support the existing partnerships for onchocerciasis and trachoma control until these diseases are eliminated as public health problems.

OBJECTIVE 5. Monitor progress in elimination of avoidable blindness at national, regional and global levels

87. Information on causes, the magnitude and geographical distribution of blindness and visual impairment, together with their trends, is essential for evidence-based advocacy and planning. Likewise, understanding the constraints and gaps in current service delivery and monitoring how these are corrected by Member States are crucial to successful implementation. Necessary and timely adjustments can only be made on the basis of continuous monitoring and periodic evaluation of action to prevent blindness.

Proposed action for Member States

88. Provide regularly updated data and information on prevalence and causes of blindness and visual impairment, disaggregated by age, gender and socioeconomic status.

89. Strengthen standardized data collection and establish surveillance systems using existing WHO tools (for example, those used for cataract, trachoma and onchocerciasis).

90. Provide regular reports using the WHO standardized reporting system, on progress made in implementing national blindness-prevention strategies and plans.

Action for the Secretariat

91. In collaboration with the main stakeholders, review and update the list of indicators for monitoring and periodic evaluation of action to prevent blindness and visual impairment, and determine targets and timelines [2009–2011].

92. Review data inputs in order to determine the impact of action to prevent avoidable blindness and visual impairment at country level, with the aim of showing a reduction in the magnitude of avoidable blindness, pursuant to resolution WHA56.26 [2009–2011].

93. Document, from countries with successful blindness prevention programmes, good practices and blindness prevention systems or models that could be modified or applied in other countries, pursuant to resolution WHA56.26 [2009–2010].

94. Initiate periodic independent evaluation of work on preventing blindness and visual impairment, including that of international partnerships, to be reviewed by the WHO Monitoring Committee for the Elimination of Avoidable Blindness [2009–2010].

95. Contribute to the Global Burden of Disease 2005 study¹ [2009–2010].

Proposed action for international partners

96. Provide collaborative support to Member States and the Secretariat in monitoring and evaluating progress in prevention and control of blindness and visual impairment at regional and global levels.

97. Collaborate with WHO in establishing a network for review of regional and global monitoring and evaluation of progress in the prevention of blindness and visual impairment.

INDICATORS

98. In order to assess trends in the causes of blindness and visual impairment, to measure the progress made by Member States in preventing blindness and visual impairment, and to monitor implementation of this action plan, a set of core process and outcome indicators needs to be identified and defined. The indicators will mostly focus on action taken by the Secretariat and by Member States. Each country may develop its own set of indicators based on priorities and resources; however, in order to track progress globally and regionally, data and information collection needs to be standardized. The current set of indicators used by WHO in monitoring and reporting on the global status of the prevention of blindness and visual impairment² should be reviewed and updated. Baseline values are available in WHO for many of the indicators; for those for which there are no baseline values, mechanisms will be established for collecting relevant data.

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¹ <http://www.globalburden.org/>.

² Document WHO/PBL/03.92.