

The accomplishments of the global initiative VISION 2020: The Right to Sight and the focus for the next 8 years of the campaign

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In the first 12 years of VISION 2020 sound programmatic approaches have been developed that are capable of delivering equitable eye health services to even the most remote and impoverished communities. A body of evidence around the economic arguments for investment in eye health has been developed that has fuelled successful advocacy work resulting in supportive high level policy statements. More than a 100 national plans to achieve the elimination of avoidable blindness have been developed and some notable contributions made from the corporate and government sectors to resource eye health programs. Good progress has been made to control infectious blinding diseases and at the very least there is anecdotal evidence to suggest that the global increase in the prevalence of blindness and visual impairment has been reversed in recent years, despite the ever increasing and more elderly global population. However if we are to achieve the goal of VISION 2020 we require a considerable scaling up of current efforts—this will depend on our future success in two key areas: i) Successful advocacy and engagement at individual country level to secure significantly enhanced national government commitment to financing their own VISION 2020 plans. ii) A new approach to VISION 2020 thinking that integrates eye health into health system development and develops new partnerships with wider health development initiatives.

Key words: Avoidable blindness and visual impairment, impact, scaling up, VISION 2020

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Accomplishments to Date

VISION 2020: The Right to Sight global initiative was launched in 1999 by the World Health Organization (WHO) and The International Agency for the Prevention of Blindness (IAPB), with the aim of eliminating avoidable blindness by the year 2020 and in so doing preventing an estimated 100 million people from going blind. An indicator of the impact of VISION 2020 is whether the prevalence of avoidable blindness is indeed declining.

The global prevalence of visual impairment

The latest estimates^[1] as to the number of visually impaired persons in the world indicate that in 2010 there was a total of 285 million, representing some 4.2% of the global population. Table 1 outlines the main causes of visual impairment:

Comparison of current and earlier global prevalence estimates is not simple. Definitions of blindness and visual impairment have changed and refined modeling and increased data pools mean that latest data are not strictly comparable with earlier estimates.

Prior to the launch of VISION 2020 global estimates^[3] for the number of blind people put the figure at almost 38 million people and 110 million with low vision. The prediction was that, due to the aging and growing world population, this

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Table 1: The causes of visual impairment in terms of estimated numbers of people in 2010

Eye Condition	Blind* (millions)	Low Vision* (millions)	Visually Impaired (Low Vision + Blind)* (millions)	Percentage
Uncorrected Refractive Error	1.18	118.68	119.86	42
Cataract	20.08	74.10	94.18	33
Glaucoma	3.15	2.56	5.71	2
AMD	1.97	0.89	2.85	1
Corneal Opacity	1.58	1.28	2.85	1
Trachoma	1.18	1.67	2.85	1
Diabetic Retinopathy	0.39	2.46	2.85	1
Childhood Undetermined	1.58	1.28	2.54	1
Undetermined	8.27	43.10	51.37	18
Total	39.37	246.02	285.39	

*Using the definitions of visual impairment outlined in the International Classification of Diseases Update and Revision 2006, which defines impairment according to presenting vision.^[2] And combining the two categories of moderate and severe (< 6/18 ≥ 6/60 and < 6/60 ≥ 3/60) and referring to them as low vision (< 6/18 ≥ 3/60); with blindness ≤ 3/60

would rise to an estimated 76 million blind people by 2020. These early figures excluded blindness due to uncorrected refractive error (URE). Later estimates^[4] which included URE put the figure at 45 million blind people in 2004, plus another 269 million low vision thus a total of 314 million visually impaired people which represented some 5% of the global population at that time.

It is interesting to compare the most recent estimates of the total number of blind people of 39 million, against the original projected estimates made at the start of VISION 2020^[5] [Fig. 1]. In terms of absolute numbers and as a percentage of the population the number of blind people does appear to be declining gradually and when one considers the increasingly aging nature of the global population (the numbers of people aged ≥ 50 years increased by 18% between 2004 and 2010) this may be deemed indicative of some progress. Assessing how much of any change can be attributed to VISION 2020, as opposed to general development, is much more difficult. However, there are some pleasing success stories which are indicative of considerable progress over the past few years and which give us a clear way forward for the future.

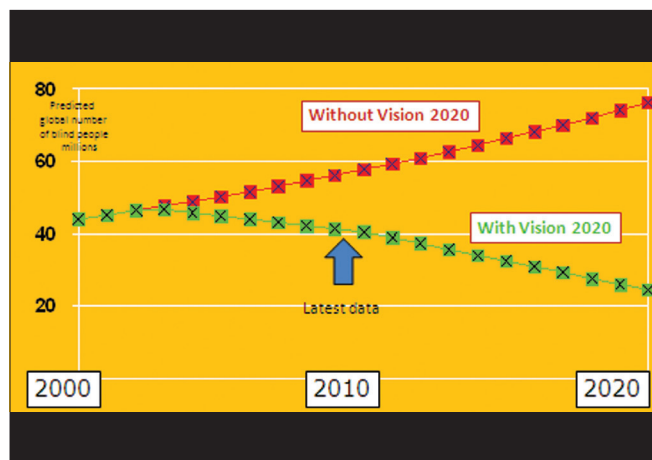


Figure 1: Projected estimates made at the launch of VISION 2020 of the number of blind people in the world in 2000 and how that would increase over the next two decades and the latest 2010 data estimate of 39 million. Courtesy of Dr. Allen Foster

Disease control

The year 2010 marked the “half way” mark in the duration of the VISION 2020 initiative. The 2010 World Sight Day report^[6] looked in detail at the progress made in the eight priority eye conditions identified within the VISION 2020, 2006–2011 Action Plan;^[7] what has been achieved so far and what still needs to be done. The key observations are summarized in Table 2.

Cataract, which is responsible for half of the world’s blindness and a third of visual impairment, has often been the initial focus of many programs designed to meet VISION 2020 goals. Considerable success has been achieved in some parts of the world – particularly in India and surrounding countries. Fig. 2 shows the cataract surgical rate in India over a period of more than 20 years.^[8] Not only has there been a 5-fold increase in absolute numbers but also has the use of intraocular lens (IOL) implants is now at levels in excess of 94%. The availability

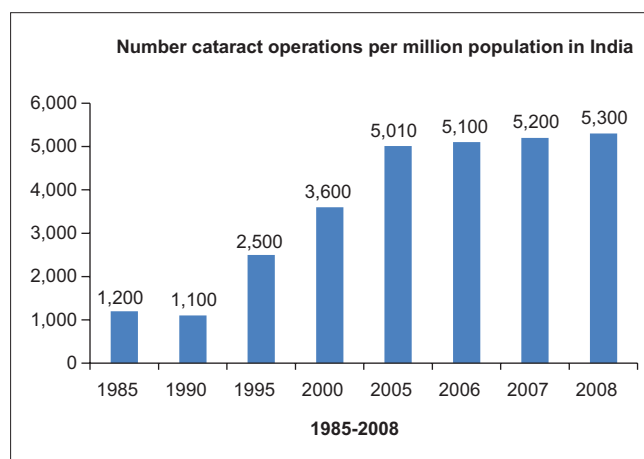


Figure 2: Increasing cataract surgical rates in India between 1985 and 2008. Courtesy of Dr. A. S Rathore

Table 2: Progress in achieving disease control and future priorities

	Evidence of effective interventions And proven public health interventions	Evidence of effective interventions But public health interventions more difficult	What needs to happen next
Prevention	Trachoma 110–320 million at risk pop. Trichiasis surgery 4.6–8.2 million + Onchocerciasis 120 million at risk pop Corneal scarring Retinopathy of Prematurity		Implementation of INSight plan + closer links with Water and Sanitation programs + Extension of Africa Program for Onchocerciasis Control to 2025 + Close engagement with the Neglected Tropical Disease movement. Maintain and improve coverage of immunization and Vitamin A supplement. Scaling up of work with neonatal units for screening + equipment and training for treatment
Restoration of sight through treatment	Cataract 94 million + Uncorrected Refractive Error 120 million + Uncorrected Presbyopia 410 million		Scaling up of existing project based interventions. + Integration into Health Systems including School Health and Integrated Management of Children (IMC) programs. + Strengthening the eye health component of primary health care
Sight preservation through treatment		Diabetic Retinopathy 3 million Glaucoma 6 million Age-related Macular Degeneration (AMD) 3 million	Stronger linkages with Diabetes programs. + Engagement with the NonCommunicable Disease (NCD) movement. + Public awareness campaigns + Operational research into effective public health interventions.

of low cost but high quality implants, which can now be purchased for as little as \$2^[9] has been a major driver, as has the promulgation of the pioneering approaches to the development of financially sustainable cataract programs that are still capable of providing free services to the very poorest members of society, pioneered by institutions such as the Aravind Eye Care System; the L.V. Prasad Eye Institute and others.

The true extent of the magnitude of URE became apparent when definitions of visual impairment were changed to presenting vision rather than best corrected;^[2] this change was the result of prolonged advocacy work from stakeholders engaged with VISION 2020. The 120 million people visually impaired from URE refers to distance vision and one may add to this the estimated 410 million people^[10] that have near vision problems and whose quality of life and earning potential is decreased for want of a simple pair of reading spectacles.

A key element in the successful delivery of refractive services to rural India has been the recent development of Vision Centers, a small facility with a trained Vision Technician able to deliver eye care to 50,000 people, including: primary eye care, refraction, dispensing of spectacles, detection and referral of sight-threatening conditions, as well as spectacle-making facilities to supply every five Vision Centers.

The promotion of training standards^[11,12] for optometrists, optometric technicians and optical technicians, and the establishment of new schools of optometry is another notable success; as is the promotion of low cost quality spectacles, lenses and frames^[9] such as that supplied through the Hong Kong Low Vision and Durban resource centers. Interest in adjustable spectacles has grown, though the effectiveness of this as a solution to the problems of URE remains to be proven.^[13] The acceptance of Optometry as a profession remains an issue in many countries and is an important advocacy issue for VISION 2020 going forward in many countries.

Though predating VISION 2020, control programs focusing upon both onchocerciasis and trachoma, are important aspects of the VISION 2020 global initiative.

In 1974 the first Onchocerciasis Control Program (OCP) began in West Africa based upon vector control. In 1987 it was estimated that just over 100 million people were at risk of onchocerciasis (river blindness), 300,000 were blind and approximately twice this number visually impaired.^[14] Other smaller foci of the disease were found in Latin America and the Yemen. The African Program for Onchocerciasis Control (APOC) was created in 1995 and the Onchocerciasis Elimination Program of the Americas (OEPA) in 1992. Merck and Co, Inc. developed a new drug for river blindness called ivermectin (Mectizan[®]) and decided in 1987 to donate the drug to as many who needed it for as long as was needed. Today more than 80 million people worldwide receive ivermectin treatment annually and we are on the brink of eliminating onchocerciasis in the OEPA with latest expectations being that this will be achieved by 2013. In Africa, recent studies show that the disease has been eliminated in parts of West Africa^[15] and the goal to potentially eliminate onchocerciasis from East and West Africa by 2025 is now seen as realistic.^[16]

In 2009 WHO estimated^[17] that 40.6 million people in 57 endemic countries were infected with trachoma and that 8.2 million suffered from the disabling pain of trichiasis and were

at immediate risk of blindness. Add to this the 1.18 million already blinded and another 1.67 million visually impaired by trachoma. This though represents a remarkable reduction compared with earlier data^[9] from 1990, when trachoma was thought to blind some 5.89 million people. In 2006, Morocco announced that it had met the WHO thresholds for elimination and in 2009 Ghana, Mexico, Oman, and Saudi Arabia reported similar results. A number of other endemic countries, such as Nepal, The Gambia, Mali, and Niger are approaching their target dates for elimination and have indicated that elimination of blinding trachoma as a public health problem is achievable. One of the most significant contributions has been the establishment of the WHO Global Elimination of Trachoma by 2020 (GET2020) Alliance and the endorsement of the SAFE (Surgery; Antibiotics; Face Washing; Environment) strategy. Another critical factor in trachoma control has been the donation by Pfizer, Inc. of the drug azithromycin (Zithromax[®]). Since 1999, over 150 million doses have been donated through the International Trachoma Initiative (ITI).

The International Coalition for Trachoma Control recently produced the INSight report^[18] a road map outlining what needs to be achieved to successfully eliminate blinding trachoma by the year 2020.

Much else has been achieved in terms of disease control in the first half of VISION 2020 such as the reduction in childhood blindness due to Vitamin A deficiency,^[19] improved screening and treatment for retinopathy of prematurity^[20,21] and enhanced understanding of the interventions required to treat diabetic retinopathy.^[22]

Advocacy to promote VISION 2020

An important factor leading to success so far has been the advocacy work of many stakeholders engaged with VISION 2020. To date advocacy has focused upon two broad themes—policy change and planning to promote VISION 2020 programs; and endeavoring to secure the resources required to implement national prevention of blindness plans.

In terms of policy, three World Health Assembly (WHA) resolutions WHA 56.26 (2003), WHA 59.25 (2006), and WHA 62.1 (2009) have been adopted, as a consequence of advocacy work by IAPB and other VISION 2020 stakeholders to Member States of the WHO. These resolutions have focused mainly upon avoidable blindness and visual impairment, urging member states to work on prevention, through specific national eye care plans and inclusion of these in national health plans and programs. Resolution WHA62.1 the "Action Plan for the Prevention of Blindness and Visual Impairment, 2009–2013"^[23] identified clear objectives and activities for Member States, the WHO Secretariat and International Partners. At the 2012 Executive Board meeting of the WHA it was decided to call for a follow up plan to the years 2014–2019 and the drafting of this new plan is underway. These global resolutions have been supported by regional resolutions in the Eastern Mediterranean, Africa, and Americas regions.

These global and regional efforts have been supplemented by advocacy at national level which initially involved sensitization of policy makers followed by an extensive workshop program resulting in some 104 national VISION 2020 plans.^[23]

However, plans without resources are of little impact and

so many VISION 2020 stakeholders have sought to advocate for increased contributions from national governments, Official Development Assistance, and other major funders. Significant increased allocations by national governments have been welcomed in India,^[8] Pakistan,^[24] and more recently in China.^[6] While many bilateral and multilateral donors have supported the APOC program only the Australian Government has made significant funding (\$65 million approx) to VISION 2020 more broadly through its Australia Blindness Initiative. The \$100 million “Seeing is Believing” program funded by Standard Chartered Bank is another very notable contribution.

The economics of visual impairment

An impressive body of evidence proving the highly cost effective nature of eye health interventions and the financial and human benefits that ensue from both restoring sight and preventing sight loss has been built up to bolster advocacy work.

A national-level assessment of the economic cost of visual impairment carried out in Australia in 2004 showed that the annual direct costs of treating eye disease were \$1.8 billion, and when indirect costs were included of \$3.2 billion, the total costs were equivalent to 0.6% of gross domestic product (GDP).^[25] A similar study in the United Kingdom for 2008 calculated that the total costs of visual impairment in adults were equivalent to 0.45% of GDP.^[26]

Combining two studies that estimated the annual global loss of productivity of people with visual impairment, Frick and Foster^[27] (eye conditions other than URE) and Smith *et al.*^[28] (URE only) we can estimate that, in 2010, the total loss of productivity for all visually impaired people to be around \$200 billion, rising to at least \$300 billion by the year 2020 if nothing were done to reduce avoidable blindness. These estimates are confirmed by a more recent study^[29] that put productivity losses from blindness and low vision among the developed country economies alone at around \$167 billion in 2010.

A number of studies have used measures of the economic rate of return as an indicator of the value of investment in eye care programs. A very successful program, focusing on trachoma and cataract surgery, took place in The Gambia between 1986 and 1996.^[30] Surveys were carried out at both the outset and completion of the project. Results suggested a 40% reduction in the overall prevalence of blindness was achieved. The cost of the program was US\$ 1.5 million, while lifetime benefits (measured by increased labor productivity) were US\$ 4.5 million. On a discounted basis, this represents an economic return of 10%: a high return rate for a healthcare program.

The Onchocerciasis Control Program in West Africa is estimated to have resulted in an economic rate of return of 20%, through increases in labor productivity and the reclamation of land for agricultural production.^[31] Moreover, a study^[32] of a World Bank-supported program to address cataract-related blindness in India calculated the annual cost of the program at \$0.15 billion, and estimated an economic gain (in terms of increased productivity) of US \$1.1 billion per annum: a remarkably high rate of return.

A 2010 study by Kuper *et al.*^[33] examined the impact of cataract surgery among people aged ≥ 50 years in three low-income countries (Kenya, Philippines, and Bangladesh). On

average, household income of those who underwent cataract surgery grew by around 50%, yet further evidence that investment in eye care pays, and contributes to the achievement of the 1st Millennium Development Goal: the reduction in poverty.

The Next 8 Years

As outlined above very real progress has been made over the first 12 years of VISION 2020 but if we are to reach the VISION 2020 goal of eliminating avoidable blindness by the year 2020 much will depend on our ability to now scale up our efforts—can we take model and pilot projects, often initiated by nongovernment organizations (NGOs), to scale? Will national governments and big donor agencies resource the WHA resolutions and the aspirations of the 100 + country plans? [Fig. 3] Our main challenge is now a different one and will require new approaches if we are to succeed.

Scaling up VISION 2020 will depend on success in key areas that include:

- I. Aligning our efforts more closely with health systems
- II. Forging closer partnerships with major health development movements
- III. Advocacy, primarily at the country level.

Aligning VISION 2020 with health system development

A study by Mangham and Hanson^[34] on scaling up of health programs suggests that one should consider the barriers that are currently preventing health approaches from being taken to scale. Often the vertical nature of many health projects mitigates against their being taken to scale and a critique of VISION 2020 to date is that, by and large, many programs have been run by NGOs in an isolated and vertical manner, that have sometimes created “Islands of Excellence” serving the immediate population well but doing little for the majority of citizens living outside the project area. There is an element of truth here and beyond the “eye health profession” VISION 2020 has achieved at best modest recognition. VISION 2020 would, certainly not be the only disease specific program to have such criticism leveled at it but with its relatively low profile compared with the “killer” diseases of human immunodeficiency virus infection/acquired immunodeficiency syndrome (HIV/AIDS), tuberculosis (TB), and malaria it is a high risk strategy. IAPB, among others, has recently attempted^[35] to highlight the need for VISION 2020 to engage more fully with the health strengthening approach currently exercising the minds of many health development policy makers and donors [Fig. 4].

Take, for example, the issue of human resources for eye health, the focus of much attention in most VISION 2020 plans and with clear global targets as laid out in both the original and second VISION 2020 global initiative Action Plans.^[5,7] Parallel to this, the Joint Learning Initiative on Human Resources for Health, had a major impact on international and national policies on human resources by providing evidence to calculate the level of human resources needed to reach universal health coverage.^[36] The WHO led Global Health Workforce Alliance (GHWA) was spawned from such initiatives and is an important campaign to address the estimated global shortage of 4 million health workers. VISION 2020 will need to acquire a much stronger presence within movements of this type and

align itself with the GHWA's important "Kampala Declaration and agenda for global action"^[37] if we are to achieve growth in eye health human resources and see new cadres of eye health personnel accepted and funded by national health systems. To date VISION 2020 has focused on training which is an important aspect of human resource development, but only one part of a complex jigsaw that includes wider policy issues such as staff retention and motivation, deployment to rural areas, 'brain drain', etc.

In terms of service delivery the IAPB primary eye care group has recently outlined how eye health should be integrated into existing primary health systems^[38] rather than develop stand alone and ultimately, very likely unsustainable, vertical primary eye care services.

But the eye health world is not always playing catch up—sometimes it is at the forefront of health system development. The modus operandi of current onchocerciasis control programs has been community directed distribution through a network of volunteers working in their immediate community. This has proved so successful that the approach has been taken up by the Neglected Tropical Disease movement to provide mass drug administration for several other worm-related diseases and by other health sectors for interventions such as bed-nets for the prevention of malaria.^[39] Another key issue is health financing. It is estimated that in low-income countries only some 5% of health finance comes from NGOs and a further 5% through official development assistance. Of the remainder 20–25% comes from government (mainly for salaries) and 60–70% from direct payments by patients.^[40] Engagement with the major development policy areas of social protection, social and community health insurance schemes, etc. will be paramount if we are to deliver eye services to the "bottom 20%" of the population. Recently IAPB has been exploring with the World Bank opportunities to include cataract operations in "Performance Based Financing (PBF) programs, which stimulate the supply side of health services by paying health care providers for delivering specific services, to explicit protocols, with a system of inspection and auditing to assure compliance and to raise quality where necessary. The recent report^[41] of an IAPB mission to Burundi not only outlined the opportunities for eye health providers to engage with this national health financing scheme but also warned of the huge risk to the sustainability of eye health services if they did not do so.

Forging closer links with major health development movements

Another important aspect in the successful scaling up of VISION 2020 will be the forging of either new or much stronger links with other health initiatives. The importance of forging a stronger alliance with the Global Health Workforce alliance has already been mentioned. Fig. 5 indicates from a disease control perspective why it is paramount to work closely with organizations involved in the NonCommunicable Diseases (NCDs) and the Neglected Tropical Diseases (NTDs) movements. If further reasons are required one only needs to look at the focus upon the NCDs at the UN Summit held in New York in September 2011^[42] and the January 2012 announcement of enlarged funding for the NTDs made by the World Bank, The governments of the United States and of the United Kingdom and the Gates Foundation.^[43]

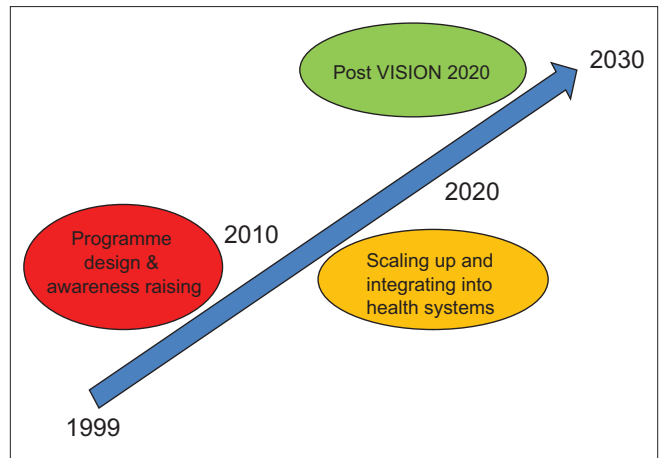


Figure 3: VISION 2020—a brief history of time

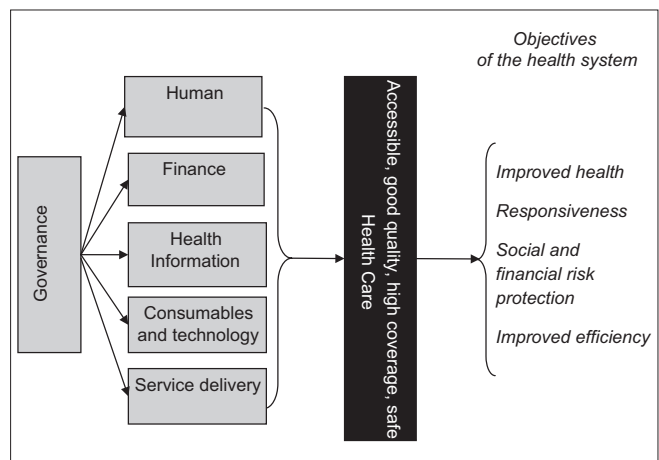


Figure 4: The foundations of the health system. Courtesy of Karl Blanchett and Robert Lindfield^[27]

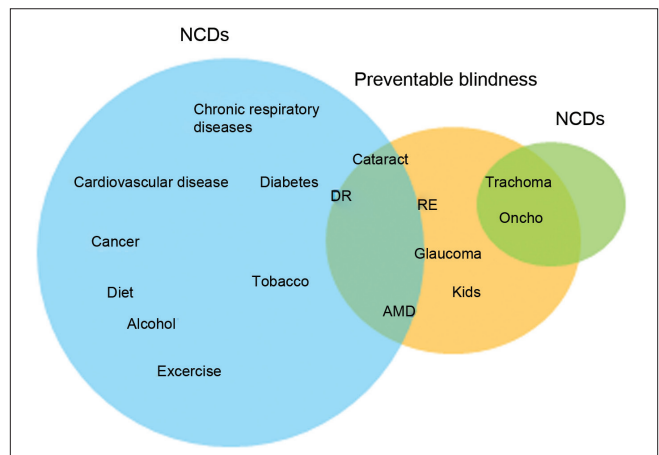


Figure 5: The inter-relationships between VISION 2020 diseases and the NonCommunicable Disease and Neglected Tropical Disease movements. Courtesy Dr. Kate Taylor

Advocacy at the country level

The importance of working at the country level has always been prominent within VISION 2020, hence the considerable effort

that has gone into developing the 100 + national plans. But securing the commitment of governments to achieving VISION 2020 in their country is now probably the single most important factor in determining our future success. Without it no number of Action Plans or Resolutions will have the desired impact. Rabiou *et al.*^[44] have recently drawn attention to the importance of effective country focused advocacy and suggested ways this can be approached. Successful advocacy at the country level requires effective civil society groupings within each country to both support and lobby for stronger National Prevention of Blindness Committees (NPBCs) that in turn can do internal lobbying within their own Ministries of Health. To help in this process IAPB has recently produced a manual of good practice for NPBCs^[45] and is preparing a manual and training program for competency in advocacy skills.

Conclusion

The elimination of avoidable blindness can be achieved, but to achieve the aspiration of VISION 2020 a significant scaling up of current activity is required. We need *more* programs, *better* programs and we need *faster* progress toward our goal.

This will require programmatic approaches to be aligned more closely with health system development; new partnerships to be made and a renewed emphasis on gaining country level commitment. Some of this takes us out of our current professional comfort zone, but we have several assets that can embolden us as we advocate and forge new links. Through VISION 2020 we have identified not only the problem but also the solution. We have strong evidence to support our programmatic and advocacy approaches. We know what needs doing and how to do it and have much that other health movements could learn from. We must though become better at selling our message and bringing new players of global influence to our table.

References

- Pascolini D, Mariotti SP. Global estimates of visual impairment: 2010. *Br J Ophthalmol* 2012;96:614-8
- World Health Organization. List of Official ICD-10 Updates. ICD-10 Updates 2006. Ratified October 2006. Available from: <http://www.who.int/classifications/icd/2006updates.pdf>. [Last accessed on 2012 Jan].
- Thylefors B, Negrel AD, Pararajasegaram R, Dadzie KY. Global data on blindness. *Bull World Health Organ* 1995;73:115-21.
- Resnikoff S, Pascolini D, Mariotti SP, Pokharel GP. Global magnitude of visual impairment caused by uncorrected refraction errors in 2004. *Bull World Health Organ* 2008;86:63-70.
- World Health Organization. 2006 Global initiative for the elimination of avoidable blindness. WHO/PBL/97.61 Rev 2. Available from: http://www.who.int/blindness/Vision2020_report.pdf. [Last accessed on 2012 Aug].
- IAPB, World Sight Day Report 2010. Available from: <http://www.vision2020.org/mediaFiles/downloads/1691061/SotWSReportwithStopPress.pdf>. [Last accessed on 2012 Feb].
- World Health Organization. Global initiative for the elimination of avoidable blindness: Action plan 2006-2011.
- Rathore AS. Assistant director of the India NCPB; Presentation to VISION 2020 India meeting in 2010.
- International Agency for the Prevention of Blindness, Standard List. Available from: <http://www.iapb.standardlist.org>. [Last accessed on 2012 Feb].
- Holden B, Fricke T, Ho S, Wong R, Schlenther G, Cronjé S, *et al.* Global vision impairment due to uncorrected presbyopia. *Arch Ophthalmol* 2008;126:1731-9.
- International Centre for Eye Education. Refractive Error Training Package. Available from: <http://www.icee.org/publications/research/pdfs/hr/A%20Comprehensive%20Refractive%20Error%20Training.pdf>. [Last accessed on 2012 Feb].
- European Council of Optometry and Optics. ECOO European Diploma of Optometry. Available from: <http://www.ecoo.info/mm/DiplERegulations.pdf>. [Last accessed on 2012 Feb].
- Declaration of the second Oxford conference on vision for children in the developing world. Oxford: St. Catherine's College; 2011. p. 7-8. Available from: <http://www.schoolsandhealth.org/Documents/Declaration%20of%20the%20Second%20Oxford%20Conference%20on%20Child%20Vision.pdf>. [Last accessed on 2012 Aug].
- World Health Organization. Onchocerciasis and its control. Report of a WHO Expert Committee on Onchocerciasis Control. WHO Technical report Series 852. Geneva: WHO; 1995.
- Diawara L, Traoré MO, Badji A, Bissan Y, Doumbia K, Goita SF, *et al.* Feasibility of onchocerciasis elimination with ivermectin treatment in endemic foci in Africa: First evidence from studies in Mali and Senegal. *PLoS Negl Trop Dis* 2009;3:e497.
- APOC, 17th session of the Joint Action Forum. Kuwait City: Final Communiqué; 2011. p. 12-4.
- Mariotti SP, Pascolini D, Rose-Nussbaumer J. Trachoma: Global magnitude of a preventable cause of blindness. *Br J Ophthalmol* 2009;93:563-8.
- International Coalition for Trachoma Control, 2011. "2020 INSight". Available from: http://trachoma.org/sites/default/files/guidesandmanuals/2020INSight_EnglishLR.pdf. [Last accessed 2012 Aug].
- Gogate P, Kalua K, Courtright P. Blindness in childhood in developing countries: Time for a reassessment? *PLoS Med* 2009;6:e1000177.
- Zin AA, Moreira ME, Bunce C, Darlow BA, Gilbert CE. Retinopathy of prematurity in 7 neonatal units in Rio de Janeiro: Screening criteria and workload implications. *Pediatrics* 2010;126:e104-7.
- Early treatment for Retinopathy of Prematurity Cooperative Group. Revised indicators for the treatment of retinopathy of prematurity: Results of the early treatment for retinopathy of prematurity randomized trial. *Arch Ophthalmol* 2003;121:1684-96.
- Guidelines for the comprehensive management of diabetic retinopathy in India. A VISION 2020: The Right to Sight India publication 2008, developed by the Aravind Eye Care System. Available from: http://www.vision2020india.org/dr_manual.pdf. [Last accessed 2012 Aug].
- World Health Organisation, 2009. WHA Resolution 62.1 Action Plan for the prevention of blindness and visual impairment 2009-2013. Available from: <http://www.who.int/blindness/publications/en/index.html>. [Last accessed on 2012 Feb].
- Khan AA. Charting new frontiers of hope in Pakistan. *Community Eye Health* 2007;20:65.
- Centre for Eye Research Australia. Clear Insight: The Economic Impact and Cost of Vision Loss in Australia, An overview of the report prepared by Access Economics Pty Ltd, 2004.
- Access Economics. The economic impact of visual impairment in the UK adult population. 2009.
- Frick KD, Foster A. The magnitude and cost of global blindness: An increasing problem that can be alleviated. *Am J Ophthalmol* 2003;135:471-6.
- Smith TS, Frick KD, Holden BA, Fricke TR, Naidoo KS. Potential lost productivity resulting from the global burden of uncorrected refractive error. *Bull World Health Organ* 2009;87:431-7.

29. The Global Economic cost of Visual Impairment. Access Economics PTY Limited; 2010. Available from: http://www.amdalliance.org/user_files/documents/Global%20cost%20of%20VI_FINAL%20report.pdf. [Last accessed 2012 Aug].
30. Frick KD, Foster A, Bah M, Faal H. Analysis of costs and benefits of the Gambian eye care program. *Arch Ophthalmol* 2005;123:239-43.
31. Kim A, Benton B. Cost – benefit analysis of onchocerciasis control program. Washington D.C.: The World Bank; 2005.
32. Shamanna BR, Dandona L, Rao GN. Economic burden of blindness in India. *Indian J Ophthalmol* 1998;46:169-72.
33. Kuper H, Polack S, Mathenge W, Eusebio C, Wadud Z, Rashid M, *et al.* Does cataract surgery alleviate poverty? Evidence from a multi-centre intervention study conducted in Kenya, the Philippines and Bangladesh. *PLoS One* 2010;5:e15431.
34. Mangham LJ, Hanson K. Scaling up in international health: What are the key issues? *Health Policy Plan* 2010;25:85-96.
35. Blanchet K, Lindfield R. IAPB Briefing paper on health system strengthening. Available from: <http://www.vision2020.org/mediaFiles/downloads/1691061/HealthSystemsandEyeHealthBP>. [Last accessed on 2012 Feb].
36. Chen L, Evans T, Anand S, Boufford JL, Brown H, Chowdhury M, *et al.* Human resources for health: Overcoming the crisis. *Lancet* 2004;364:1984-90.
37. World Health Organization, Global Health Workforce Alliance, The Kampala Declaration and Agenda for Global Action. Available from: <http://www.who.int/workforcealliance/Kampala%20Declaration%20and%20Agenda%20web%20file.%20FINAL.pdf>. [Last accessed on 2012 Feb].
38. IAPB Primary Eye Care Working Group, Minutes of a Workshop held in Dubai, September 2011. Available from: <http://www.vision2020.org/documentHandler.cfm?dld=3532&pflag=docm93jijm4n3532>. [Last accessed on 2012 Feb].
39. Africa Programme for Onchocerciasis Control. Revitalising health care delivery in sub Saharan Africa. Available from: http://www.who.int/apoc/publications/cdti_healthsystems/en/index.html. [Last accessed on 2012 Feb].
40. Bundy D, Presentation on behalf of the World Bank to the IAPB Council of Members Meeting, Dubai, 1 September 2011. Available from: <http://www.vision2020.org/documentHandler.cfm?dld=3533&pflag=docm93jijm4n3533>. [Last accessed on 2012 Feb].
41. Etya'ale D, Cozens E. Report of a mission to assess opportunities for the inclusion of eye health activities in performance-based financing system in Burundi. 2011. Available from: <http://www.vision2020.org/documentHandler.cfm?dld=3531&pflag=docm93jijm4n3531>. [Last accessed on 2012 Feb].
42. United Nations, September 2011, A/66/L.1 Political declaration of the High level meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases.
43. Molyneux DH. The 'Neglected Tropical Diseases': Now a brand identity; responsibilities, context and promise. *Parasit Vectors* 2012;5:23.
44. Rabiou MM, Al Rajhi A, Qureshi MB, Gersbeck J. Enhancing advocacy for eye care at national levels: What steps to take for the next decade? *Middle East Afr J Ophthalmol* 2012;19:75-82.
45. IAPB, National Prevention of Blindness Committee Manual. Available from: <http://www.vision2020.org/mediaFiles/downloads/1691061/NECManualLowResFINAL3.pdf>. [Last accessed on 2012 Feb].

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