

GLOBAL OPHTHALMOLOGY

STRIVING TO MEET TARGETS

Global impact of VISION 2020's goal of eliminating avoidable blindness by the year 2020 has been largely positive, but it must involve changing mindsets

by Dermot McGrath



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Twelve years ago the World Health Organization (WHO) teamed up with international non-governmental organisations (NGOs) and professional societies in eye care to launch “VISION 2020 – The Right to Sight”. Its ambitious objective was to eliminate avoidable blindness by the year 2020.

With just eight years to go to the VISION 2020 deadline, the statistics make daunting reading: in 2010 an estimated 285 million people worldwide were visually impaired, while 39 million were classified as blind. Over 85 per cent of those who are visually impaired live in developing countries, with cataract still the most common cause of preventable blindness in more deprived regions of the globe.

But the news is not all bleak. While everyone agrees that 39 million blind people is far too many, it is still six million less blind people than when VISION 2020 first started its campaign.

Other sources of encouragement lie in the fact that onchocerciasis is now largely controlled and great progress has been made in reducing trachoma. The last 10 years have also seen great strides in increasing cataract outputs, not just in India but in countries in Africa, south-east Asia, China and South America with low cataract surgical rates, according to Parikshit Gogate MD, paediatric ophthalmologist and community eye care specialist from Lions NAB Eye Hospital, Miraj and Community Eye Care Foundation, Pune, India.

“There is now more focus on the outcomes, not just the output numbers,” Dr Gogate told *EuroTimes*. “Childhood blindness is more on the radar. Vitamin A, measles and corneal infections are being better controlled thanks to better primary healthcare and immunisation programmes. But improved neonatal care in the third world is also causing a new epidemic of retinopathy of prematurity. Glaucoma and diabetic retinopathy are being taken



Cataract patient and son at KCMC Hospital, Moshi, Tanzania

Courtesy of Paul Courtright DrPH

seriously in the public health debate and refractive errors are now considered a significant cause that needs to be addressed,” he said.

One of the most significant achievements of VISION 2020 is the recognition by WHO that prevention of blindness is a priority area in its work and subsequently mandating it to member countries to include it in their national health plans, points out Gullapalli N Rao MD, chairman of the L V Prasad Eye Institute (LVPEI) in Hyderabad, India, and a leading figure in global prevention of blindness programmes.

“The entire vision and eye care community now has a recognisable brand in ‘VISION 2020 – The Right to Sight’ and we have seen enhancement of funding for this activity with significant allocation by some national governments in addition to funding by private donors and organisations,” he told *EuroTimes*.

Huge inequities still exist While the global impact of VISION 2020 has

been largely positive, the benefits on the ground have not always been proportional to the needs of the local population, some observers feel.

“Much has been achieved in the past 10 years, although it has not been even across the globe or even within individual countries. Huge inequities still exist,” is the frank assessment of Paul Courtright DrPH, director of the Kilimanjaro Centre for Community Ophthalmology (KCCO) International in Cape Town, South Africa, and Moshi, Tanzania and an acknowledged expert on ocular health in developing countries.

Despite the disparities in eye care delivery worldwide, Dr Courtright said that the first decade of VISION 2020 has served as a valuable learning experience for all concerned. “A major lesson learned in the past 10 years is that there is no ‘one-size-fits-all’ solution,” he told *EuroTimes*. “The context varies, as do the expectations of the local population, the epidemiology of cataract, and so forth. Also our expectation

that developing a national plan would automatically lead to many 'district' VISION 2020 plans being developed and implemented turned out to be unrealistic," he said.

As Dr Courtright sees it, much of the problem of low service delivery is frequently due to poor management systems rather than lack of eye care providers, even though the lack of providers in some regions is definitely a problem that needs to be addressed.

A tendency to ignore the private sector and focus mostly on government, especially in Africa, also proved to be a mistake, he said, noting that the private sector continues to grow in many developing countries and many interesting public-private partnership models have arisen in the healthcare sector.

Another important breakthrough has been the acknowledgment within VISION 2020 of the effectiveness of district plans, with a "district" covering about one to two million people, said Dr Courtright.

"This has turned out to be a very practical approach and there are many successful district plans from which we can learn. I have seen strong dedicated teams make a significant difference even in very poor countries. Examples exist in Madagascar, Burundi, Uganda and other countries," he said.

Indian ROP project shows benefits of district-based programmes

In India, for instance, an innovative telemedicine project to combat retinopathy of prematurity (ROP) in infants has met with significant success applying many of the principles of district-based care [see *EuroTimes Vol 17, Issue 5, page 42*].

"In our context, the support of the district administration is germane to the success of the programme," said Anand Vinekar MD, FRCS, head of the Paediatric Vitreo-Retina Department at Narayana Nethralaya Postgraduate Institute of Ophthalmology, Bangalore, India.

In the Karnataka Internet-Assisted Diagnosis of ROP (KIDROP) project, district health officers have been made the point of contact in an individual zone of activity, which typically consists of six districts divided into about 300 to 400 kilometre radius of care zones.

"The district reproductive and child health officer (RCHO) is our 'nodal officer'," explained Dr Vinekar. "He is accountable to his district health officer (DHO), who in turn is accountable to us, the private partner, via our project manager, a non-physician and the zonal team leader who is a physician," he said.

Further down the ladder of administration, Dr Vinekar has proposed the empowering of the ASHA (Accredited Social Health Activist) worker, the cadre that forms the backbone of the National Rural Health Mission (NRHM) in the country.

"The ASHA is responsible for creating awareness and enrolling the 'at-risk' population, in this case the premature infant," he said. Recently, Dr Vinekar published the results of "REDROP" - a novel, low-cost method of enrolling infants for ROP screening from centres which do not have screening programmes. The cost of enrolling a single infant was US\$ 0.10 and relied on the fact that babies in India are weighed in most centres at birth, or within a

few days in case of home deliveries.

As the private partner in the public-private partnership, Dr Vinekar's institution provides free training, reading and treatment, while the government provides the funding for the equipment as well as the running costs, including the salaries of the personnel working on the project.

"Public private partnerships form a very powerful medium in reaching out to the rural areas. As KIDROP has shown, technical expertise from the private sector and public funding and organisational infrastructure is key to the programme's success in creating accessible super specialty care to the rural masses in a short time span and in a sustainable environment," he told *EuroTimes*.

Funding not the most critical issue

While the issue of funding remains a perennial concern for NGOs and other organisations involved at the front-line of prevention of blindness strategies, experts agree that it is not the major stumbling block to progress. "Funding is a serious limitation, but not the most important," said Dr Vinekar. "Resources other than mere fiscal need better utilisation. Sometimes deconstructing social biases including ignorance and illiteracy are critical in abolishing the barriers in healthcare accessibility," he said.

Another potential problem can be the resistance to change among local populations when newer technologies are being introduced, yet Dr Vinekar believes

that education and advocacy can help sway opinions.

"It is important to persist with passion, so that people understand that the changes are for their betterment. We initially faced problems in promoting the use of telemedicine in rural areas. The fact that a non-physician could be the first, and sometimes the only, point of physical contact was not easy for people to accept. But once they figured out the benefit, the numbers swelled. Today we perform over 1,000 sessions a month from some of the most peripheral areas of the state," he said.

Better utilisation of available resources and better management systems are two pathways to improved eye care without drawing on enhanced funding, agrees Dr Courtright. "Much of the planning at the district level needs to focus on two issues: firstly, how to improve management and efficiency of the eye care unit, and secondly how to improve access and use of eye care services by the population. While these two require resources, the funding needs are not huge," he said.

Dr Courtright added that in his experience, interventions often require close mentoring for a number of years to help the teams solve teething problems, advocate for local resources, refine pricing and improve cost recovery.

Help needed closer to home

Although the major thrust of VISION 2020 efforts are understandably geared towards sub-Saharan Africa and poorer parts of



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What role for the ESCRS in prevention of blindness programmes?

Under the presidency of José Güell MD, the ESCRS launched an initiative to support two charity projects: one supporting the development of a paediatric eye care service at the Gondar Referral Hospital in Ethiopia through ORBIS, and the other an ongoing long-term Oxfam programme in Uganda to provide safe water and sanitation to the local population.

As Dr Güell sees it, these projects should not be seen as ends in themselves, but rather as a starting point for a long-term commitment. "I would say that this is just the first extremely small step in the right direction to support initiatives in the developing world and I sincerely believe that the ESCRS must continue and do more in the future," he said.

Dr Güell, a passionate advocate of increasing aid to developing countries, believes that while the ESCRS should be more directly involved in such projects, it is vital to define how best the society might contribute.

"It makes no sense that we



José Güell

try to replicate the work that organisations such as ORBIS and Oxfam are already doing and for which they already have the required competence and experience. We need to sit down with these groups and see from a professional point of view, and not just an economic perspective, what they actually need. If we as a society of European surgeons might be able to help them in other ways than just financial aid, well let us try to organise how to do it," he said.

Nevertheless, Dr Güell acknowledges that the principal requirement for bodies such as ORBIS and

Oxfam is to maintain or increase current funding levels in order for them to achieve their goals.

"What these organisations mostly need is economic cooperation because they already have their own strategies to use these funds to help people in the developing world. If we trust what they are doing and the methods they have adopted to do so, then the only thing that we can do is to make maximum efforts to provide funds to them to continue the work they are already doing, because they are professionals in that domain and it makes no sense for us to try to interfere with that," he said.

Dr Güell believes that increased funding to projects in developing countries should be given priority status rather than considered as an afterthought. "I think that what we must do as citizens of the world is to change our mentality and to change it proportionally, so we need to perhaps look at our priorities and maybe invest a little bit less in new technologies. The goal of course is not to halt

progress, such as research into femtosecond laser technology, but to diminish just a little bit the vast amounts that we invest in these projects and divert some of those funds into making our colleagues around the world better equipped to deal with the real issues that they face in saving sight every day," he said.

The bottom line, insists Dr Güell, is that we need to change mindsets and move away from the concept of charity as simply writing a cheque once a year to assuage one's conscience.

"This is not about being able to sleep well at night with a clear conscience. The stark reality is that if we continue to advance by a factor of 10 every year and only give 0.1 to the developing world, then the disparities will only increase over time. We need to treble or even quadruple our funding and continue to do so until we are able to progress together. Otherwise we will have a completely bipolar standard of care between the developed and developing world and that is in nobody's interest," he concluded.



KCCO field assistant measuring vision on outreach in Kilimanjaro Region, Tanzania



Using digital images of ROP to educate rural mothers during focus group meetings

Courtesy of Paul Courtright, DrPH

Courtesy of Anand Vinekar, MD, FFCS



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We do tend to overlook the underprivileged in our own communities

Hugh R Taylor

Asia, the ocular health of underprivileged or minority communities in more developed nations does not always get the attention it deserves, some experts believe.

For instance, blindness rates amongst indigenous Australians are six times those of the rest of the Australian population and there is a major shortfall in the provision of eye care services to indigenous communities. “We do tend to overlook the underprivileged in our own communities,” said Prof Hugh R Taylor, Harold Mitchell Chair of Indigenous Eye Health at the University of Melbourne and one of the lead authors of a recent report setting out the policy changes needed to address the unnecessary vision loss in Australian Aboriginal people.

Dr Taylor’s research has shown how the dire situation currently affecting the indigenous Australians might be reversed by increasing eye care resources by about four times current levels, adopting a national and coordinated approach to policy, and delivering services in partnership with the community control sector.

“We often hear the argument that it is not worth spending the money on eye care and that it is too expensive,” Prof Taylor told *EuroTimes*. “In fact, eye care is extraordinarily cost effective – cataract surgery costs \$3,000 per quality-adjusted

life year (QALY) and diabetic retinopathy examinations \$15,000 per QALY. In Australia, each \$1 spent on eye care yields a \$5 return,” he said.

Prof Taylor also gave short shrift to the notion that Australia is already spending too much on Aboriginal health and that the money is wasted.

“It is true we currently spend \$1.39 on indigenous health for each \$1 spent on mainstream, whereas a decade ago it was \$0.80 for Indigenous health. However, as there is three times the morbidity and vision loss, one would expect to spend at least three times as much even if delivery costs to remote areas were not higher than urban areas. In terms of cataract surgery, seven times less surgery is done for indigenous people,” he said.

In Prof Taylor’s view, even a limited increase in funding will go a long way to improving the eye care of Australia’s Aboriginal people. “With a relatively small increase in expenditure, there will be a huge increase in efficiency and reduction in waste for indigenous eye health services. A doubling in funding will increase glasses use by 2.5 times, diabetes eye exams by five times and cataract surgery by seven times,” he said.

What is true for Australia’s Aboriginal population may also be true for many other deprived communities in developing countries as the clock ticks down to the VISION 2020 deadline.

Most of those working in prevention of blindness programmes know only too well that achieving the VISION 2020 goals will be an uphill battle. And yet guarded optimism remains the watchword for those who toil daily to ensure that the “right to sight” does not become another empty slogan.

The road ahead Much has been learned over the past decade and a broad consensus is emerging on what needs to be done if VISION 2020 is to achieve its targets in eight years’ time.

“We need more emphasis on cataract outcomes, better spectacle compliance and enhanced education to dispel myths and highlight concerns about diabetes and glaucoma,” said Dr Gogate. “In short, we need a comprehensive rather than a cataract-centric approach to eye care,” he added.

For Dr Rao, a three-pronged approach will be required if the targets are to be achieved. “First we need to replicate the success achieved at the global scale at regional, national and district levels. Second, we must learn from the successful models and replicate them with appropriate local modifications. Finally, we need to enhance high-quality human resources development programmes to bring it all together,” he said.

For Dr Courtright, several key points need to be taken on board. “We must remember that cataract is still the leading cause of blindness globally. Efforts are needed to improve both the quantity and quality of cataract surgery, as one without the other is useless,” he said.

The next ingredient is to focus on local team building, comprising an ophthalmologist, nursing staff, optometrist, and manager, he said. “We should not expect financial sustainability in terms of complete cost recovery from patient or public funding in the poorest environments but work first to develop organisational sustainability,” he said.

Some positive encouragement and feedback also goes a long way in boosting morale and spreading best practices to other populations in need.

“We should not forget to celebrate our successes,” Dr Courtright concluded. “Many of the rapid assessments of avoidable blindness (RAABs) in Africa have shown a cataract surgical coverage of 70 per cent or more, so teams need to be recognised for what they have accomplished. Ultimately, VISION 2020 is about people receiving a high-quality service and that is what our focus should always be.”