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Dr Gerhard Schuhmann, Board Member LIGHT FOR THE WORLD Austria
Dear Reader,

over the last 20 years the world has observed a significant growth in population, particularly of the age group 50 years and above – the age group most affected by blindness and visual impairment. Calculating from the baseline of 1990 one would expect to find that by 2010 the number of blind people had increased by 60%; in reality, however, the number of blind people globally has remained unchanged with 32.4 million in 2010 (1990: 31.8 million, confidence interval: 95%). So the global prevalence of blindness and visual impairment has fallen significantly, and even more importantly, it has fallen in all regions, including in developing countries. In sub-Saharan Africa the blindness prevalence for the population aged 50 years and older declined from 6.11% in 1990 to 4.25% in 2010 (page 4).

The increasing of eye health services and the investment in infrastructure, human resources and disease control actions as part of the global initiative VISION 2020 have contributed largely to this success. Despite this encouraging trend – because of the ageing population and emerging conditions such as diabetic retinopathy in low- and middle income countries – there is an urgent need to further increase universal eye health. Universal Eye Health is the main thrust of the new WHO Global Action Plan, adopted by the last World Health Assembly (page 6).

Further work also needs to be done on reaching the poorest, as they still face many barriers to accessing eye health services – see also the report on the findings of the ‘Rapid Assessment of Avoidable Blindness’ in Sofala province, Mozambique (page 8). A recently published guide on disability inclusion in eye health targets a group particularly affected by poverty – persons with disabilities – and shows ways to improve their access to eye health – an issue that is not only relevant for developing countries (page 10).

Thank you for your continuing support for eye health in the poorest regions of our world,

Prof Dr Gerhard Schuhmann
Ophthalmologist
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Dr Staf Nietvelt
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Success in Fighting Avoidable Blindness

Findings from the Global Burden of Disease Study

Johannes Trimmel
Director, International Programme Support and Policies, LIGHT FOR THE WORLD

Recently published data from the Global Burden of Disease (GBD) Study 2010 show an encouraging trend in prevalence rates of blindness and visual impairment over the last 20 years. Between 1990 and 2010 the global prevalence of blindness fell from 0.60% to 0.47%, and in sub-Saharan Africa a significant drop from 0.80% to 0.62% can be observed.

According to the GBD Study the absolute number of blind people has not changed between 1990 and 2010 and has remained stable at around 32 million. While at first sight this indicates no progress, it is in fact a great success story. Over the last 20 years there has been significant demographic change with a considerable growth in population and the ageing of the world’s population, which has led to an even higher increase of people aged 50 and above, the age group most affected by visual impairment and blinding eye conditions.

Based on the 1990 prevalence figures and taking into account population growth and ageing, the GBD Vision Loss Group calculated that for 2010 one would estimate 50.9 million blind people and 268 million people with mild and severe visual impairment. The current figures (32.4 million and 191 million) show that in 2010 there were approximately 100 million blind and visually impaired people less what could be expected. The percentage change from 1990 – because of change in age-specific prevalence – is about 58% for blindness and 45% for mild and severe visual impairment.

In all regions worldwide, women had a higher age standardised prevalence of vision impairment and blindness than men. Women represent 60.0% of blindness and 57% of mild and severe visual impairment globally. Interestingly, the relative sex difference was biggest in the high-income regions and lowest in the Sub-Saharan African regions.

The decline in prevalence rates, especially in the population group 50 years and older, is an encouraging trend that can be observed in all regions, including the regions with higher poverty rates. The data provide good evidence that it is possible to eliminate avoidable blindness by generally fighting poverty, improving public health, strengthening national health systems, and increasing eye health services, reaching especially poorer populations.

The Global Burden of Disease (GBD) Study is a comprehensive regional and global assessment of mortality and disability from major diseases, injuries, and risk factors. The GBD project was commissioned in 1990 and is a collaborative effort between hundreds of experts worldwide, including researchers at the World Health Organization (WHO), Harvard School of Public Health, the Institute for Health Metrics and Evaluation (IHME), and the World Bank. The GBD Study 2010 quantified the burdens of 291 major causes of death and disability and 67 risk factors disaggregated by 21 geographic regions and various age-sex groups. The Global Burden of Disease Vision Loss Expert Group comprised over 60 experts from around the world. The sources for the data on blindness and visual impairment reflected in the GBD Study 2010 are 227 studies from 84 countries. 243 published and unpublished studies were reviewed systematically from 1980 to January 2012.
However, further firm and concerted action is needed to eliminate avoidable blindness. Cataract is still the leading cause of blindness globally, and up to 80% of blindness is avoidable. The demographic changes in the coming decades will pose an additional challenge to the elimination of avoidable blindness and visual impairment, as does the huge increase in diabetes prevalence, leading to an enormous additional need for eye care provision.

References:
I. IAPB Briefing Paper on GBD numbers and prevalence: www.iapb.org/resource/gbd-numbers-and-prevalence
Universal Eye Health

A Global Action Plan to Reduce Avoidable Visual Impairment

Peter Ackland
CEO, International Agency for Prevention of Blindness

At its last meeting the World Health Assembly adopted the new Global Action Plan towards Universal Eye Health. It is the most important strategic document that we have in the field of eye health at global level and keeps eye health and the elimination of avoidable blindness and visual impairment on the radar of health policy makers.

The overall target – which is to reduce the prevalence of avoidable visual impairment by 25% by the year 2019 from the baseline of 2010 – once achieved will continue the downward trend we have seen in the age standardised prevalence rate of both blindness and moderate & severe visual impairment in the period 1990 to 2010.

The development of the Global Action Plan was driven by governments in a consultative process, which led to a document that reflects very well the current thinking in health policies and the focus on building strong national health systems, with eye health integrated.

The Global Action Plan is structured around three clear objectives: the first objective focuses upon generating evidence on the magnitude and causes of visual impairment and on the state of eye health services, and using this evidence to advocate for greater political and financial commitment by national governments to eye health. Objective two encourages the development of policies, plans and programmes to enhance universal eye health. It refers to the need for integration of eye health into strengthened health systems. Objective three stresses the need for multi-sectoral engagement and the incorporation of eye health into poverty-reduction strategies and wider socio-economic policies.

Important though the new Global Action Plan is, it will only add value if it is now taken up seriously at country level, with national governments taking responsibility for implementation in their country. The main building blocks for implementation are:

1. Provision of comprehensive eye care services, covering promotion, prevention, rehabilitation and care.
2. Access to eye health for everyone, including the poor, minorities, indigenous people, persons with disabilities, women and those living in rural areas.
3. Integration of eye health in national health strategies and systems.
4. Point-of-care payment should not prevent access and should be free for the poorest.

In working along these lines, a number of key actions need to be taken consistently to overcome current bottle-necks. The scaling-up of human resources for eye health with training of ophthalmologists, eye nurses and optometrists, the integration of eye health in primary eye health delivery, and the official recognition of eye care lists of essential medicines, diagnostics and health technologies are some of the areas to be focussed on. Moving forward will only be possible when all stakeholders – governments, professional societies, non-governmental organisations, teaching institutions – join hands and align their initiatives towards an overall national strategy, that’s developed with broad participation.

Finally, it is essential to monitor progress and create evidence. The respective indicators suggested in the Global Action Plan are grouped in three areas: (1) prevalence and causes of visual impairment to understand the scope of the problems, causes and trends; (2) the number of eye care personnel, broken down by cadre, in order to understand the human resources available for eye care and trends; and (3) cataract surgical rate and cataract surgical coverage as proxy indicators to monitor eye care provision.

With so much current international interest on the neglected tropical diseases and the four priority non-communicable diseases (cancer, respiratory diseases, heart diseases and diabetes) we must continue to fight for attention for our cause of better eye health.
WHAT IS THE GLOBAL ACTION PLAN?
A global commitment endorsed by all WHO Member States to improve eye health for everyone (‘Universal Eye Health’) over the next 5 years.

THE ISSUE

285 million people are visually impaired

4/5 cases are avoidable

90% Of the world’s visually impaired people live in developing countries

OUR TARGET 25% Reduction of avoidable blindness and visual impairment by 2019

HOW?

STRONG & EQUITABLE EYE HEALTH SYSTEM

Collect evidence on magnitude and causes
Train more eye doctors, nurses and optometrists
Provide comprehensive eye care services to all

IMPLEMENTATION OF NATIONAL EYE HEALTH PLANS

WHAT GOVERNMENTS MUST PUT IN PLACE

1. Comprehensive eye care services for major causes of visual impairment, covering promotion, prevention, rehabilitation and care
2. Access for everyone, including the poor, minorities, indigenous peoples, persons with disabilities, women and those in rural areas
3. Eye health integrated into national health systems
4. Point-of-care payment should not prevent access and should be free for the poorest

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RAAB Study in Mozambique Helps Better Planning of Eye Health Services

Amir Bedri, MD, MSc,
Senior Consultant Eye Health, LIGHT FOR THE WORLD

The availability of relevant and up-to-date data is essential for the proper planning of eye health services. However, generating such data using population based surveys in developing countries, where there are resource constraints, is often difficult. Population based surveys are expensive, usually complicated and take a longer time. An alternative is a methodology known as Rapid Assessment of Avoidable Blindness (RAAB).

Sofala is a central province of Mozambique with a population of 1.85 million living in 12 districts. LIGHT FOR THE WORLD and the Provincial Health Department (DPS) of Sofala have been implementing a prevention of blindness project since 2004. The project provides eye care services not only at the base hospital in the provincial capital Beira but also at several outreach sites in the province.

In December 2012, a RAAB study was conducted in Sofala province with the support of LIGHT FOR THE WORLD.

The RAAB study results showed that the prevalence of blindness (presenting VA <3/60, better eye) among those who are 50 years of age and older was 3.2 % [2.6 to 3.8; 95 % CI]; and that of visual impairment (presenting VA<6/18 in the better eye) was 17.5 % [CI: 16.3 to 18.9].

### Graph: Barriers to taking up cataract services

<table>
<thead>
<tr>
<th>Reason</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease which contraindicates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On the waiting list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of operation / lose vision</td>
<td></td>
<td></td>
</tr>
<tr>
<td>An eye with good vision / no</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal for old age, not feel necessary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No time / other priorities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nobody accompanying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can not afford the operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not know where to get surgery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service not available or distant surgery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advised that the cataract becomes ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Believes it is his destiny / God’s will</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unaware treatment is possible</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

0 % 5 % 10 % 15 % 20 % 25 % 30 % 35 % 40 %

FEMALE  MALES
RAAB study being conducted in Sofala, Mozambique

Cataract was the major cause of blindness (54.2%) and visual impairment (48%). Avoidable causes of blindness were responsible for 73% of bilateral blindness and 90% of bilateral visual impairment.

Although eye care services have been implemented since 2004, the cataract surgical coverage was surprisingly low with only 33.1% of those with bilateral cataract who needed surgery having had surgery at VA <3/60 in the province of Sofala. The barriers to accessing cataract services were lack of awareness that treatment is possible or where to get the services, false belief that cataract blindness is normal for old age, services not being available or distant from where the patients live, nobody accompanying the patient to go for surgery and fear of surgery.

The results of cataract surgery were also a major concern because 31.8% of eyes that had undergone cataract surgery had VA<6/60 with best correction. The main causes of borderline or poor outcome can largely be attributed to a patient having a pre-existing eye condition of which the surgeon could not be aware, surgical complications, poor post-operative follow up and management and refractive errors.

This study has demonstrated that the high proportion of treatable causes of visual impairment justifies further action to develop eye care services in Sofala province with strategies that focus on enhancing quality and accessibility. Improving primary eye care and implementing community based eye health promotion programmes, as well as establishing linkages to the secondary eye care unit are essential to reduce barriers and increase utilisation of eye care services. Biometry should be used on a routine basis both at base hospital and outreach sites. The cataract surgical outcome should be monitored to ensure quality cataract surgery and improve uptake of services.

WHAT IS RAAB?

RAAB (Rapid Assessment of Avoidable Blindness) is a relatively simple, cheap and rapid survey methodology. It uses sound epidemiological methodology designed for a ‘district’ level (ideally 0.5-5 million pop.) and uses basic ophthalmic examinations, which can be carried out by local staff.

RAAB provides data on the prevalence and causes of blindness, cataract surgical outcome and coverage as well as on the main barriers to uptake of cataract surgery. It only includes people who are 50 years of age and older, where prevalence of blindness is the highest – hence smaller sample sizes are required.

It can be repeated after 8 to 12 years to monitor progress over time.

In Sofala province 3 out of 100 persons who are 50 years of age and older are blind. Cataract is still the leading cause.
Inclusion Made Easy in Eye Health Programmes

Disability inclusive practices for strengthening comprehensive eye care

Joanne Webber and David Lewis,
CBM Australia

Around 15% of the world’s population, or an estimated 1 billion people, live with disabilities. Disability is present in all communities with 22% of people in poverty in the world’s poorest countries living with a disability.¹

Persons with disabilities report multiple barriers to accessing health services with these barriers being greater than for people without a disability.

At the World Sight Day 2013, CBM Australia published the Inclusion Made Easy in Eye Health Programs Guide to address these barriers effectively.

Disability inclusion in eye health programs is an approach which seeks to ensure access, best quality outcomes and long term improved quality of life for all persons with disabilities including vision impairment, who access eye health programs. Disability Inclusion in Eye Health Programs is a user-friendly guide for all eye health practitioners. It outlines key principles of disability-inclusion, practical tips and case studies promoting inclusion of people with a disability in all eye health activities. To download this guide in PDF and Word formats, go to http://bit.ly/1gh9OP3

REFERRAL PROCESSES IN A DISABILITY-INCLUSIVE EYE HEALTH PROGRAM

Bok Sokah is five years of age and was referred by a disability service, CDMD, to Caritas Takeo Eye Hospital where he was diagnosed with cataract and a lazy eye. Sokah’s referral to the eye hospital was difficult due to his deafness and inability to talk. From the time of Sokah’s birth, his mother Nget did not receive much help from the rest of her family, recognising that they loved him but did not know what to do. “They say things like ‘It must be your fault that he is like this’.” Before contact with CDMD, Sokah did not receive any support for his impairments nor did he go to school. “My son always has to stay with me. This means that I can’t go to work as much as I’d like to. It means that our income is low and it makes it hard to buy food and things we need.” Due to Caritas Takeo Eye Hospital’s ability to include people with disabilities, Sokah was treated for his eye conditions including removal of cataracts. He was also referred to other services to provide support for his deafness and speech barriers.

Sokah left the hospital with the ability to see and is now enrolled in his local school and receives speech therapy. Nget has also been able to return to work to improve their family’s income. These interventions have not removed all Sokah’s impairments, but they have addressed some disabling aspects of his deafness and speech impairment.

Donation of viscoelastics for 40,000 cataract surgeries in Africa

The most generous in-kind donation ever received by LIGHT FOR THE WORLD, which results from our longstanding partnership with the pharmaceutical company CROMA, has reached LIGHT FOR THE WORLD’s aid projects recently. CROMA is providing LIGHT FOR THE WORLD with its entire annual requirement of eye medication of the highest quality free of charge, thus enabling LIGHT FOR THE WORLD to perform more than 40,000 cataract surgeries including follow-up treatment.

“People in Africa are entitled to medication of the same quality as people in Austria”, said Mag. Martin Prinz, CEO of the pharmaceutical company CROMA, based in Lower Austria.

Furthermore he said “As a successful company, we consider it our responsibility to give something back to society. We have decided to do this in a region where people are most in need of such help and where our know-how can contribute to sustainable and efficient improvements.”

CROMA’s generous in-kind donation consists of 50,000 units of viscoelastics, with the medication being delivered to countries such as Burkina Faso, Ethiopia and Mozambique in several tranches.

CROMA’s aid track record is impressive: in the last 10 years, many thousands of eye surgeries have been performed using CROMA medication. “For many years now, we have been able to rely on aid from this partnership and know we are not receiving substandard goods but only medication of the highest quality. This is why this in-kind donation is so valuable”, said Rupert Roniger, CEO of LIGHT FOR THE WORLD.

High-quality medicinal follow-up treatment is crucial for the prevention of post-operative complications particularly in developing countries. Patients often have to walk for many days to reach the next ophthalmologist.

Complications resulting from the surgery often cannot receive successful follow-up treatment”, explains Dr. Karl Rigal, Chief Resident Ophthalmologist at the Vienna Hanusch Hospital and board member of LIGHT FOR THE WORLD.

“This in-kind donation helps us to ensure effective follow-up treatment and thus sustainable success of cataract surgeries in developing countries”, says Dr. Rigal.
LIGHT FOR THE WORLD is a European confederation of national development NGOs committed to saving eyesight, improving the quality of life and advocating for the rights of persons with disabilities in underprivileged regions of our world.

Our focus countries are Ethiopia, Bolivia, Burkina Faso, Cambodia, Southern DR Congo, Mozambique, Northeast India, Pakistan and South Sudan. In addition, we are active in 6 partner countries in Africa, Asia, the Pacific, Latin America and Europe.

LIGHT FOR THE WORLD has been actively involved in Blindness Prevention Programmes in developing countries for 30 years. We strive to achieve the goals of VISION 2020 in aligning our work to national prevention of blindness strategies. We support comprehensive eye care programmes, trachoma and onchocerciasis control, and human resource development for eye care professionals. Our focus is on removing barriers and creating fully accessible eye health services for local communities, especially for those who are poor or excluded.

In 2013 our programmes reached 1,177,197 people and more than 50,000 cataract surgeries were performed.