Global situation

Facts and figures on visual impairment and blindness

Approximately 253 million people worldwide are visually impaired. In addition, around 1.1 billion people have the condition presbyopia (long-sightedness) which is the normal loss of near focusing ability, mostly occurring with age. It is estimated that 89% of visually impaired people live in low- and middle-income countries and that 55% of visually impaired people are women. Around 75% of all visual impairments are in fact avoidable; the major global causes being uncorrected refractive errors (49%), cataract (25.8%), glaucoma (2.8%), age-related macular degeneration (4.1%), corneal opacity (1.7%), trachoma (0.8%) and diabetic retinopathy (1.2%). There are an estimated 1.4 million children who are blind in the world, with 75% of those living in Africa and Asia.¹

Rationale

Although a high percentage of blindness is avoidable, many people in developing countries still become blind or visually impaired. The burden of blindness and visual impairment in sub-Saharan Africa is enormous; with 21.6 million blind and visually impaired people and 101 million with near-vision impairment. Vision loss hampers performance at school, reduces employability and productivity, and generally impairs quality of life. There is an intrinsic link between poverty and vision loss and any programme aiming to improve eye health services is ultimately supporting sustainable development.

The Economic Case

It is estimated that vision loss costs $168 billion per annum in loss of productivity globally. A study by PricewaterhouseCoopers (PwC) revealed that for every dollar invested in eliminating avoidable blindness in developing countries, a return on investment of four dollars would be achieved.

Emerging issues and trends

Rapid increase in population growth & ageing: It is projected that there will be a 5.6% increase in the prevalence of avoidable visual impairments due to a rapid increase in population growth and ageing.

The myopia epidemic: The global population affected by myopia is expected to reach nearly 50% by the year 2050 (an increase from 28% in 2010).

¹ Vision Loss Expert Group, 2015 figures
**Increase in diabetes and diabetic retinopathy**: In sub-Saharan Africa, a 90% increase in diabetes prevalence is predicted over the next fifteen years. A third of all diabetics develop diabetic retinopathy and 10% develop a vision-threatening form of the disease.

**Innovations and “Quick Fixes”**: There have been increasing efforts to find new ways to provide health consultations (e.g. through apps) and to supply spectacles (e.g. “One Dollar Glasses” or “Ready2Clip”) at minimal cost. It is crucial to ensure that these are embedded into health systems and linked to service provision.

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**Our approach**

**What do we do?**

Our vision is to provide comprehensive eye health for those who need it most, by strengthening health care systems.

**By comprehensive, we mean:**

- Strengthening the **whole spectrum of care** from promoting good health, prevention of conditions, good care practice, rehabilitation and the availability and use of assistive devices;
- Ensuring **as many eye diseases** and conditions as possible can be addressed;
- Making sure mobilisation strategies and referral systems are in place for services to be available **in the most rural as well as urban areas**.

We are committed to reinforcing each of the **building blocks promoted by the World Health Organisation** for eye health:

- Service delivery,
- Leadership and governance,
- Health workforce,
- Medical products and technologies,
- Information and research, and
- Health care financing.

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**Guiding Frameworks and policies**

**Our Eye Health programme is guided by:**

- VISION 2020 – THE RIGHT TO SIGHT
- World Report on Vision
- The Sustainable Development Goals (SDGs) and their guiding principle to “Leave no-one behind”. We aim to directly contribute to SDG 3 - Good health and Well-being. Our programme also indirectly contributes to SDGs 4, 5, 6, 8, 10 and 17.

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*Fig. 1: Building blocks promoted by the World Health Organisation*
Who do we target?

We aim to promote access to eye health for all. We focus on regions where eye health is less developed and on the poorest and hardest to reach populations who need our support most. Therefore, we aim to improve access to eye health services for people living in rural areas, people who are unable to afford services, women, persons with disabilities, and children.

Theory of change

Our priorities

- Strengthen human resources for eye health in sub-Saharan Africa;
- Promote the provision of excellent quality and comprehensive eye care services (including contributing to the elimination of trachoma);
- Supporting the infrastructure of eye health service delivery for functional eye health services;
- Advocacy, awareness raising and policy influencing to promote comprehensive eye health.

In order to address these priorities, we

- support partners to deliver quality surgical and clinical services and consultations in hospitals, as well as at outreach sites that are visited on a regular basis by eye care teams;
- ensure that services are embedded within health care systems;
- ensure referral systems are in place in national health care systems - between communities and schools and the nearest eye health professionals and between primary health centres and secondary/tertiary hospitals - within the health-service pyramid;
• promote awareness about different eye diseases and practising good health among the general population;
• regularly monitor the quality of the services, recommend measures to improve, and provide additional on-the-job training. We aim to have a pool of local and international advisors with different areas of expertise (cataract, glaucoma, paediatric, Uncorrected Refractive Errors, Low Vision);
• contribute to strengthening the evidence base through data collection, surveys and assessments, evaluation and research.

**Cataract**

• We promote manual small incision cataract surgery as the standard of care;
• Under certain conditions we support phacoemulsification cataract surgery;
• We encourage partners to monitor cataract surgical outcome.

**Glaucoma**

• We support training institutions in partner countries to teach resident ophthalmologists on how to do proper surgical intervention for glaucoma;
• We promote affordable surgical and laser services for glaucoma. Medication is often not a sustainable or affordable solution for patients in our context;
• The ICO Guidelines for Glaucoma Care guide our work.\(^3\)

**Diabetic Retinopathy**

• We advocate for closer collaboration between general doctors and ophthalmologists in the field of diabetes;
• We support training institutions in partner countries to teach resident ophthalmologists how to do proper retinal photocoagulation for DR;
• The ICO Guidelines for Diabetic Care guide our work.\(^4\)

**Trachoma**

• We support partners in their efforts to eliminate blinding trachoma as a public health problem;
• Our programmes are guided by the WHO recommended “SAFE” strategy:\(^5\) Surgery – Antibiotics – Facial Cleanliness - Environment;
• We only support dedicated and certified eye care workers to provide trachomatous trichiasis surgery;
• We encourage partners to seek collaboration with different stakeholders including the WASH sector to achieve full SAFE implementation.

**Uncorrected Refractive Errors (URE)**

• We support partners to improve the capacity of selected eye care cadres in performing proper sphero-cylindrical refraction;
• We encourage sustainable approaches to make affordable tailor-made optical corrections and ready-made readers accessible.

**School Eye Health (SEH)**

• We train primary and secondary school teachers to carry out simple school screening activities;
• We provide access to affordable, adequate spectacles, from ready-made to custom-made glasses;
• We incorporate school eye health activities in district or provincial development plans;
• We are helping to introduce school eye health in the school health agenda;
• The IAPB School eye health guidelines guide our work.\(^6\)

**Child eye health**

• We support partners to address child eye health, including surgical intervention, refractive and Low Vision services;
• We encourage the integration of primary eye care into primary health care to address the avoidable causes of visual impairment and blindness in children.

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\(^4\) [http://www.icoph.org/ICOGuidelinesforDiabeticEyeCare.pdf](http://www.icoph.org/ICOGuidelinesforDiabeticEyeCare.pdf)

\(^5\) [https://www.who.int/blindness/causes/trachoma/en/](https://www.who.int/blindness/causes/trachoma/en/)

\(^6\) [https://www.iapb.org/resources/school-eye-health-guidelines/](https://www.iapb.org/resources/school-eye-health-guidelines/)
What don’t we do?

- We do not support interventions that are **not in line with the national eye health strategic plan** of the respective country;
- We do not support external **cataract campaigns**, especially when they fail to coordinate with the national Eye Health programme and/or take place in the proximity of established eye care centres;
- We do not support campaigns or outreach activities that **focus on one disease only**;
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- We do not support campaigns or outreach activities that **focus on one disease only**;
- We do not promote **“quick fix” interventions** to address the shortage of human resources for eye health. While some interventions might aim to “bridge the gap” these should always be combined with long term investments;
- We do not support programmes where an eye examination or refraction is **not provided by an appropriately trained medical professional**;
- We do not support a concept of **“good enough”** vision for our beneficiaries. We are striving to strengthen the professionalism of specialised human resources for eye health. For example, some companies offer only 5 Dioptre powers to choose from, instead of offering proper refraction and suitable spectacles;
- We do not support any form of **self-refraction with “self-adjusting spectacles”** under any circumstances, especially when it comes to children.

Areas for innovation

New technologies and apps have been developed with the aim to improve the quality and efficiency of eye health services. We are following these developments closely to explore if and how these can be of added value for our programme. Additionally, we are exploring new strategies addressing Uncorrected Refractive Errors, e.g. refractive surgery for the hardest to reach populations with refractive errors.

Implementation

Geographical focus

Our Eye Health programme is focused in sub-Saharan Africa. We have comprehensive Eye Health programmes in Burkina Faso, DRC, Ethiopia, Mozambique, Rwanda and Tanzania. Our flagship programme on Uncorrected Refractive Errors and School Eye Health is in Uganda. Some eye health activities take place in South Sudan, but the security situation is making our efforts to strengthen the health care system a challenge.
Partnerships and alliances

At international level and sub-regional levels

We are an active member of the International Agency for the Prevention of Blindness (IAPB) and work in close collaboration with the World Health Organisation (WHO) and the International Council of Ophthalmology (ICO). We are an active member of the International Coalition for Trachoma Control (ICTC) and coalitions such as the Global alliance for the Elimination of Trachoma (GET 2020), the NGDO Coordination Group for Onchocerciasis Elimination as well as Neglected Tropical Diseases NGO Network (NNN). We are part of “Our Children’s Vision” alliance and the Eyelliance. In Africa, we collaborate with IAPB-Africa, WHO-Afro, the College of Ophthalmology of Eastern, Central and Southern Africa (COECSA) and the Francophone Africa Ophthalmology Society (SAFO).

At country level

National Ministries of Health are crucial partners who plan and implement eye health strategies and programmes and contribute to the salaries of medical personnel as well as hospital running costs. Ministries of Education are also crucial stakeholders for our School Eye Health programme. We participate in – and when necessary take a leading role in convening – National Eye Care Coalitions.

At regional level within the countries

We partner with regional health authorities as well as regional or district hospitals to strengthen eye health services in the catchment area. Regional health and education authorities plan and implement eye health activities.

At community Level

We train teachers, community health workers, nurses and traditional healers to identify people with visual impairments and to ensure that they receive adequate services. Disabled people organisations (DPOs) as well as Non-Governmental Organisations (NGOs) also have an important role to play to raise awareness within communities on the importance of eye health.
Types of partnerships

Collaboration with public service providers
We recognise that governments have a responsibility to provide health care services to their population. Therefore, we aim to collaborate with the public sector, ensuring that quality services are provided from within the existing health system. These can be national, regional or district hospitals. We work with our partners to ensure uptake from the population, to strengthen referral systems and to improve the quality of the services provided, both within hospitals and at outreach sites.

Collaboration with non-profit/NGO service providers
We partner with NGO/non-profit organisations as service providers where collaboration with public institutions is particularly challenging and/or where these actors provide the lion’s share of the services. The aim is to complement the public sector and provide the highest possible quality of services, paying particular attention to sustainability and cost-recovery, in line with the National Eye Health plans and health regulations. These centres are embedded in the public health system and may become training institutions.

Collaboration with training institutions
As our focus is on human resource development, we work together with training institutions. Our objective is to ensure the highest possible level of training in the best possible learning environments for the students, in order to ensure high levels of surgical and clinical skills. Training institutions should have specialised staff to teach the residents appropriate techniques.

Collaboration with the Private Sector
We recognise the increasingly important role of the private sector. We are introducing Public-Private-Partnerships (PPPs) in Uganda and Mozambique. Private sector partners support us through the provision – for example – of frames and lenses for children in need.
Monitoring, evaluation and learning

In order to strengthen the evidence base in Eye Health, we support:

- **Data collection**: Strengthen Health Management Information Systems, Annual Partner Outcome Monitoring;
- **Surveys and assessments**: Rapid Assessments of Avoidable Blindness (RAABs) or Rapid Assessments of Refractive Errors (RARE), Eye Care Service Assessment Tool (ECSAT);
- **Quality monitoring**: Cataract outcome monitoring, quality monitoring;
- **Evaluations and research**: Eye health evaluations and research accompanying our programmes;
- **Learning**: Internal and external learning guides and publications, “Vision & Development”, internal “Comprehensive Eye Health” training, webinars.
Programmatic links to other thematic areas and strategies

Disability-Inclusive Education

There is a close correlation between good health and improved educational outcomes for children. Around 80% of what a child learns in school is information that is presented through visual methods. Our education and Eye Health programmes complement each other. School eye health can improve the attendance and performance of children in school while inclusive education ensures that a child whose sight cannot be restored can learn alongside his or her peers.

Economic Empowerment

Many of our beneficiaries report that they were forced to stop working and earning an income for their families due to a loss of vision. Avoiding blindness has a direct impact on a family’s income. In addition, for those individuals whose vision cannot be restored, it is very important to link them to inclusive economic empowerment and livelihood initiatives.

Disability-Inclusion in Community Development (DICD) and Disabled People’s Organisations (DPOs)

A lot of people with minor eye problems could be managed through primary health care measure. Therefore, it is important to improve access to eye health, starting at community levels. For those whose sight cannot be restored, DICD programmes as well as DPOs can play a crucial role in supporting the individual to live with dignity and higher levels of self-esteem. Such activities might include mobility training, awareness raising, livelihood activities, networking, etc. As we are engaging more and more in inclusive (eye) health, DICD can support the promotion, identification, and prevention activities of our programmes.

Advocacy

The purpose of our advocacy work is for international and national stakeholders to recognise Universal Eye Health as a priority. Specifically, we focus on: the integration of eye health into health agendas, increasing funding, increasing the recruitment, development, training, and retention of eye health workforce and improving data collection. Our main allies for advocacy are the International Agency for Prevention of Blindness (IAPB) at International and Africa levels, the WHO, as well as eye care organisations and coalitions in country.
POLICY: COMPREHENSIVE EYE HEALTH

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