The World Health Organisation's 'Vision 2020' project aims to eliminate avoidable blindness. A brief look into project achievements and remaining challenges.

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"Can anybody in this lecture theatre identify the leading cause of blindness worldwide?"
An uncomfortable silence ensues, broken by the shuffling and hushed murmurs of 250 medical students.
"Cataracts" suggests a voice somewhat hesitantly.
"Anyone else?"
"Diabetes?"
The silence continues; people start to look around, desperate for the correct response to emerge.
"Lack of glasses. The answer is a lack of glasses."

The Vision 2020 project was founded in 1999[1] by the World Health Organisation (WHO) and the International Agency for Prevention of Blindness (IAPB)[1]. The mission statement read: to reduce and eventually eradicate preventable vision impairment and blindness[1].

Figure 1: WHO and IAPB logos respectively.

Achievements

1. National Plans:
Over 100 national plans[3] have been devised since Vision 2020 started, and many have translated into improved clinical outcomes.

Sri Lankan "School Eye Health Programme" [4]
- Refractive error screening cards used by schoolteachers in elementary schools.
- Children identified as high-risk during screening are referred for specialist testing funded by regional health authorities.
- Free glasses provided for children with significant refractive errors
- Funding secured by Ministry of Health from various donor organisations.



Figure 2: A pupil in Sri Lanka selecting frames for state-funded glasses © ASELA ABEYDEERA[2]

India's rate of cataracts surgery increased by 100% from 1995 to 2008[3].

2. Generating awareness of blindness and visual impairment as global health concerns:

Preventable visual impairment and blindness is a global socio-economic and health concern.

If you were to ask a group of one hundred people to name as many public health crises as possible in one minute, you might expect many to mention communicable diseases, heart disease, and currently, the coronavirus pandemic. But how many of the one hundred would identify preventable blindness as a public health crisis?

Over 2 billion people worldwide are blind or have impaired vision. At least half of cases are preventable[3].

Common causes of preventable visual impairment are:
- Communicable disease
- Prematurity
- Uncorrected refractive errors
- Unoperated cataracts
- Diabetic retinopathy

Of all preventable cases, **almost 125 million are attributed to uncorrected refractive errors**. This is almost twice the number as the second most common cause, cataracts[5].

This issue is commonest in low- and middle-income countries, with estimates that 80% of refractive errors in some African regions are untreated, while 10% go untreated in the Western world[5].

World Sight Day:

Annually celebrated on the second Thursday of October, the first World Sight Day took place in 2000. Now a Vision 2020 initiative[6] with themes in keeping with organisational goals, the day publicises issues in eye health.

References

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Remaining Challenges

1. Inequity in eyecare: not match population Blindness is more prevalent in low- and middle-income countries, yet the provision of trained ophthalmologists does needs.

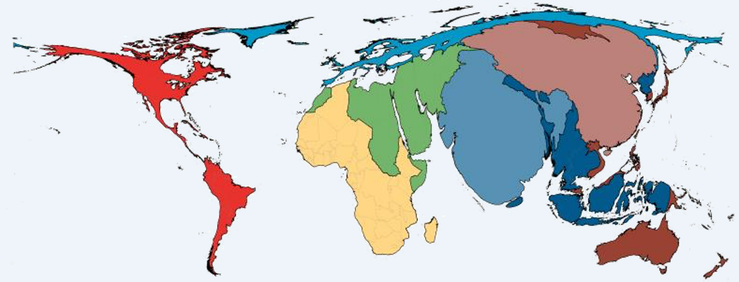


Figure 3: Prevalence of global blindness[7].

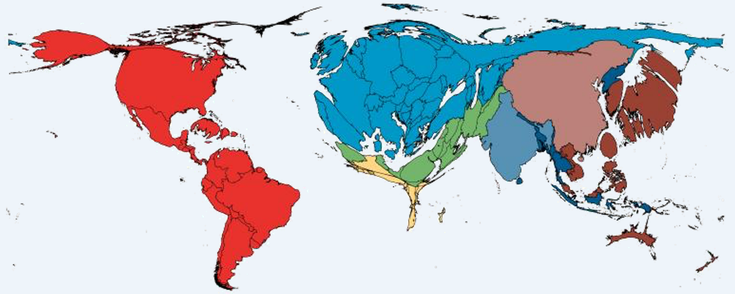


Figure 4: Prevalence of practicing ophthalmologists[7].

2. Dynamic health needs in an ageing population: The aetiological map of preventable blindness has changed. We expect to see increased prevalence of conditions such as age-related macular degeneration (ARMD) and glaucoma[8] in an ageing population. Also, non-communicable diseases such as hypertension and smoking are becoming key players in world blindness. We are diagnosing younger people with diabetes and people are living longer with the condition, leaving many susceptible to developing serious micro- and macrovascular complications.

Methods to Address These Challenges

- A shift in research focus and global health strategies to fit the changing needs of global and local populations.
- Increased funding to match increased demands and prevalence of eye disease and blindness - yet 191 of 194 countries omitted eye health from their national health strategic plans in 2019[9] e.g. cost-effective diabetic retinopathy screening programmes.
- Tackling social health inequalities at both national and international scales.

The role of Vision 2020 will be to monitor the aetiology of preventable blindness, and to guide and recommend changes in healthcare policies to address these changes.