



## Ophthalmic Public Health; the Way Ahead

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### Abstract

**Background:** Visual sciences have been progressing quickly in recent decades through globalization phenomenon. An enormous change has taken place in ocular health issues, however, there are various problems facing ophthalmic public health worldwide. In the previous years, the World Health Organization and the International Agency for the Prevention of Blindness in partnership launched the global initiative to eradicate avoidable blindness by the year 2020, VISION 2020 the Right to Sight. It has concentrated on the prevention of blindness disability and recognized a health issue-sight as a human right. In view of challenges ahead of visual sciences, close collaboration between international agencies at the global level to implement new strategies and monitor the progress will be mandatory. In these circumstances non-governmental organizations should not be neglected. World Sight Day 2012 would be a great opportunity to be a focus on importance of visual impairment as an important public health issue and discovering new challenges ahead.

**Keywords:** International ophthalmology, VISION 2020, Right to sight, World sight day

### Introduction

World Sight Day is an international day of awareness, held annually on the second Thursday of October to focus attention on the global issue of avoidable blindness and visual impairment. This year, there is no global theme for World Sight Day 2012 however this would be a great opportunity to focus on importance of visual impairment as an important public health issue.

#### *Globalization and ophthalmic public health*

We live in an age of information that is increasingly global in scope. Medical breakthroughs abound and our population is aging and living longer. Global initiatives are becoming more and more common, as well as more feasible in light of these changes.

Ophthalmology and visual sciences have been progressing quickly in recent decades through globalization of science. An enormous change has taken place in ophthalmic public health issues and has faced new challenges worldwide. In the meantime, ophthalmology and visual sciences might well be a discipline with the highest number of advancements (1). Our ability to learn so soon about advances made by ophthalmologist and visual scientists in other parts of the world is a relatively recent phenomenon. Today it is much easier to share information developed with other ophthalmologists around the world (2). In addition, an astonishing array of organizations and societies are now working together to focus on correcting

global delinquent issues so that the vision loss can be avoided (3).

### *Challenges ahead*

The statistics are staggering: 285 million people are visually impaired world-wide. Of that number, 39 million are blind and the remaining 246 million have severe to moderate vision impairment. The tragedy is that up to 80% of that number was preventable and/or treatable (4). On an ongoing basis, over 2 million people per year go blind, with cataracts being three-fourths of the cause (5) and the leading cause of blindness. Sixty-five percent of the world's population is visually impaired, and 82% that are blind are over the age of 50, which represents 20% of the world's population. Clearly, some action has to be taken but one of the many challenges is that 90% of the untreated population lives in the developing countries where there is a low ratio of healthcare resources particularly when compared to the developed countries (4).

Substantial impact is now possible on account of a combination of advances in pharmacology and technology. Medications for onchocerciasis, trachoma, and vitamin A deficiency are now widely accessible. On the other hand novel technologies, sutures, and intraocular lenses in cost affordable components are available in developing countries. (5). Despite these advancements, as well as various effort in globalization of ophthalmology by creating multilingual education material (6) global treatment for the visual impairments was seen to be woefully inadequate. For that reason, various organizations combined their forces to create International Ophthalmology Strategic Plan to Preserve and Restore Vision – Vision for the Future. Its mandate is to both encourage and enhance collaborative activities of the 150,000 ophthalmologists and other thousands of health professionals to create a sustainable program designed to dramatically reduce of the world's population the blind and visually impaired (7).

The cornerstone of this program would be education-focused. A free textbook with hundreds topics has been posted on the Internet in English as a complimentary resource. The plan is to translate that text so that all countries can benefit from a

global, current ophthalmological knowledge repository.

Other areas of focus in the Vision for the Future are the development of clinical guidelines for the provision of eye care within the existing infrastructure, however limited. At a more macro level, Vision for the Future calls for the establishment of a basic international standard for the eye care, and the last but not the least, for ophthalmologists to continue to advocate for the preservation and restoration of vision (5).

Concurrently, there is another key program: Global Initiative for the Elimination of Avoidable Blindness that is Vision 2020: The Right to Sight. Its objective is literally to improve eyesight globally, with a special focus on under-developed countries where surgically remedial cataracts are rampant in the aging population. Its main area of focus is the control of major causes of blindness: cataracts, trachoma, onchocerciasis, childhood blindness, vitamin A deficiency, surgically treatable disorders and the statistically largest group, refractive errors and low vision. Other areas of focus include human research development (secondary and tertiary workers), and infrastructure and technology development (5).

### *Vision 2020 at the international point*

Vision 2020 is to be organized and developed by each country. Currently, the program is underway (and it has been since 1999) but faces challenges in terms of funding and required functionality. The ophthalmologic community is creating curriculum for both current and ongoing education, which is tasked with continuing ophthalmologic research, all with a view to the betterment of eye care everywhere by the year 2020(7).

Nevertheless, while the statistics are disheartening, i.e., there is so much visual impairment issues that could have been prevented and/or treated, the fact that so many disparate yet common organizations (both governmental and other) would collaborate to this degree, is heart-warming. Their goals, despite the challenges faced by the under-developed countries, seem achievable. Clearly the ophthalmologic communities must grow and band together to make these targets realizable to be suc-

cessful in security funds necessary to build the infrastructure needed perhaps under a global department. In these circumstances non-governmental organizations and the role of social determinants of health (8) should not be neglected.

## Conclusion

The closer collaboration between international agencies especially International Council of Ophthalmology, World Health Organization, and International Agency for the Prevention of Blindness at the global level is required. More care, more research and, most of all, more education are required if we are willing to decrease rates of blindness and other visual impairments globally. In summary, with the world health organization, International Agency for the Prevention of Blindness, international non-governmental organizations, and the international ophthalmic community, we can all promote to up-keep to prevent and treat visual impairments worldwide (5).

As long as those ends are met, and there is continuity of effort, there seems to be no reason why the visual impairment cannot be dramatically reduced within the next decade. World Sight Day 2012 would be a great opportunity to elaborate these issues and locating appropriate solutions worldwide.

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