

Avoidable blindness

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Current global estimates indicate that blindness affects close to 45 million people, with nine out of ten blind people living in developing countries. Blindness, with its social and economic consequences, therefore represents a significant public health problem in many parts of the world.

In February of this year, WHO and a group of nongovernmental organizations² launched Vision 2020, a global initiative for the elimination of avoidable blindness. The goal of this initiative is to address the major preventable or treatable causes of blindness, particularly in developing countries, in order to stop a further increase of the global burden of blindness. Among the priority diseases singled out in the Vision 2020 initiative are cataract and trachoma.

In this issue of the *Bulletin*, two important papers deal with the assessment and monitoring of cataract and trachoma — clearly an essential part of measuring effective control of diseases that can lead to blindness.

Cataract is by far the most frequent cause of visual loss worldwide. The most common forms of cataract are still not prone to effective prevention and great efforts are therefore being made to provide sight-restoring surgery; over the last 10 years new technology and techniques have improved such surgery, including the implantation of intraocular lenses, now almost always used in patients in developed countries.

On page 455, Limburg et al. analyse the outcome of large-scale cataract surgical activities in India. The Indian National Programme for the Prevention and Control of Blindness has made impressive progress in seeking to provide cataract surgical services to all those who need them. However,

Limburg et al. demonstrate the need to pay further attention to the quality of care being provided, including provision of more appropriate refractive services for patients. Use of intraocular lens implantation is still low in India (11% of all cataract surgery) but rapid progress is taking place, including the use of surgical training courses.

Also important is the trend towards better outcomes for hospital-based eye surgery, as opposed to eye camps, an issue that is being addressed in national plans for eye care in India. Finally, the sight-restoring rate found by Limburg et al. was only 21%; this is a critical observation that needs to be taken into consideration when attempting to address an existing backlog of unoperated cases in a country. To tackle this problem effectively is complex, requiring not only improved access to surgery, but also managerial decisions to give priority to blind patients, to the extent that this is feasible.

Trachoma, in its active, inflammatory form, probably affects about 46 million people worldwide, mainly children and women living in poverty, under conditions of crowding and insufficient personal and environmental hygiene. Since trachoma is a disease of social clustering, the proper assessment of trachoma, which includes its propensity to blind and the community profile with regard to needed interventions, becomes critical. A four-pronged intervention strategy has been worked out for trachoma control, referred to as SAFE (Surgery for eyelids, Antibiotic treatment, Facial cleanliness and Environmental hygiene). These elements are all needed to obtain a sustainable and lasting reduction of trachomatous blindness.

In the article by Baral et al. on page 461, the clinical assessment of trachoma in an area of low and decreasing prevalence of the disease is related to the demonstrated presence of *Chlamydia trachomatis*. Interestingly, none of the children selected in this study as having active disease showed any evidence of harbouring *Chlamydia* at the time of examination. However, trachoma occurs in episodes of repeated infections, with seasonal variations, and this may to a great extent explain the situation in the study area

selected. Furthermore, interventions against trachoma, in particular any treatment with effective antibiotics, may remove the causative organism, and thus lead to a clinical picture in transition. The important message from the study is, however, the extreme variability of trachoma as an infectious disease, with strong social and behavioural determinants, which can lead to quite rapid changes in its potential to cause blindness. Clearly, more studies of this kind are needed to define the situation in which trachoma ceases to be a disease that causes significant levels of blindness in a community. ■

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² The group consists of the following founding members: the International Agency for the Prevention of Blindness; the Christoffel-Blindenmission (Germany); Helen Keller International, Inc. (USA); ORBIS International, Inc. (USA); and Sight Savers International (UK). In addition, there are fifteen supporting members.

