

# PREVENTION OF CHILDHOOD BLINDNESS

## New Issues in Childhood Blindness

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The main new issues in relation to blindness in children relate to a better understanding of the epidemiology, which has led to improved priority setting. In this article the most recent epidemiological data will be presented, the consequences for the VISION 2020 programme will be discussed, and research priorities considered.

### Definitions

A blind child is an individual aged less than 16 years, who has a visual acuity in the better eye of  $<3/60$ . However, many studies do not use this definition, which makes it difficult to compare the findings of different studies.

### Prevalence and Incidence

The prevalence of blindness in children (i.e., the proportion of the child population who are blind), varies from approximately 0.3/1,000 children in wealthy regions of the world, to 1.2/1,000 in the poorer countries / regions.<sup>1</sup> Blindness in children is more common in poor regions for two main reasons: firstly, there are diseases and risk factors which can lead to blindness from causes that do not now occur in industrialised countries (e.g., measles, vitamin A deficiency, ophthalmia neonatorum, malaria), and, secondly, there are fewer well equipped eye departments with ophthalmologists, nurses and ophthalmic paramedics trained in managing treatable causes of blindness (e.g., cataract and glaucoma). The incidence is therefore higher, and fewer blind children have their sight restored.

Incidence data are very difficult to obtain, but it has been estimated that there are 8 new blind children for



Children's eye care in Tanzania

Photo: Sue Stevens

every 100,000 children each year in industrialised countries. The figures are likely to be higher in developing countries.

### Magnitude of Blindness

Globally, there are estimated to be 1.4 million children who are blind, and around three quarters live in developing countries. Although the actual number of children who are blind is much smaller than the number of adults blind, (e.g., from cataract), the number of years lived with blindness by blind children is almost the same as the total number of 'blind years' due to age-related cataract. The high number of blind years resulting from blindness during childhood is one of the reasons why the control of childhood blindness is a priority of the WHO/IAPB VISION 2020: The Right to Sight programme.<sup>2</sup>

### Causes of Blindness in Children

The available data suggests that there is wide regional variation in the major causes of blindness in children. Tables 1 and 2 show the causes of blindness obtained