

A Survey of Visual Impairment and Blindness in Children Attending Four Schools for the Blind in Cambodia

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ABSTRACT

Purpose: To identify the causes of blindness and severe visual impairment (BL/SVI) in children attending four schools for the blind in Cambodia and to provide spectacles, low vision aids, orientation and mobility training and ophthalmic treatment.

Methods: Children <16 years of age were recruited from all 4 schools for the blind in Cambodia. Causes of visual impairment and blindness were determined and categorized using World Health Organization methods.

Results: Of the 95 children examined, 54.7% were blind (BL) and 10.5% were severely visually impaired (SVI). The major anatomical site of BL/SVI was the lens in 27.4%, cornea in 25.8%, retina in 21% and whole globe in 17.7%. The major underlying etiologies of BL/SVI were hereditary factors (mainly cataract and retinal dystrophies) in 45.2%, undetermined/unknown (mainly microphthalmia and anterior segment dysgenesis) in 38.7% and childhood factors in 11.3%. Avoidable causes of BL/SVI accounted for 50% of the cases; 12.9% of the total were preventable with measles being the commonest cause (8.1% of the total); 37.1% were treatable with cataracts and glaucoma being the commonest causes (22.6% and 4.8% respectively). More than 35% of children required an optical device and 27.4% had potential for visual improvement with intervention.

Conclusion: Half of the BL/SVI causes were potentially avoidable. The data support the need for increased coverage of measles immunization. There is also a need to develop specialized pediatric ophthalmic services for the management of surgically remediable conditions, to provide optometric, low vision and orientation and mobility services. Genetic risk counseling services also may be considered.

KEYWORDS: Children; Blindness; Visual impairment; Blind school; Cambodia

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