Causes of severe visual impairment and blindness in children in schools for the blind in eastern Africa: changes in the last 14 years

Njuguna, M; Msukwa, G; Shilio, B; Tumwesigye, C; Courtright, P; Lewallen, S

Abstract:

To determine the causes of severe visual impairment and blindness in children attending schools for the blind in Kenya, Malawi, Uganda, and Tanzania and to compare the findings with those of a 1994 study. Children attending schools for the blind or annexes in 4 eastern African countries were examined. The major anatomical site of and underlying etiology of severe visual impairment and blindness was recorded using the standardized World Health Organization (WHO) reporting form. A total of 1062 children aged below 16 years were examined of whom 701 (65.2%) had severe visual impairment or blindness. The major anatomical sites of visual loss overall (% and 95% CI) were cornea scar/phthisis bulbi (19%, 16.1-21.9), whole globe lesions (15.7%, 13.0-18.4), retina (15.4 %, 12.7-18.1), lens related disorders (13.1%, 10.7-15.5), and optic nerve disorders (12.3%, 9.9-14.7). Corneal scar/phthisis was not distributed equally among the countries and was highest in Malawi, similar to findings in 1995. The major etiology of visual loss was childhood factors (29.9%) and an estimated 40% of severe visual impairment and blindness was due to potentially avoidable causes. The major causes of severe visual impairment and blindness overall have not changed appreciably since 1995. There are important differences among countries, however, and using overall estimates for planning may be misleading.