

Abstract

Aim To estimate the magnitude, temporal trends and subregional variation in the prevalence of blindness, and moderate/severe vision impairment (MSVI) in sub-Saharan Africa.

Methods A systematic review was conducted of published and unpublished population-based surveys as part of the Global Burden of Disease, Risk Factors and Injuries Study 2010. The prevalence of blindness and vision impairment by country and subregion was estimated.

Results In sub-Saharan Africa, 52 studies satisfied the inclusion criteria. The estimated age-standardised prevalence of blindness decreased by 32% from 1.9% (95% CI 1.5% to 2.2%) in 1990 to 1.3% (95% CI 1.1% to 1.5%) in 2010 and MSVI by 25% from 5.3% (95% CI 0.2% to 0.3%) to 4.0% (95% CI 0.2% to 0.3%) over that time. However, there was a 16% increase in the absolute numbers with blindness and a 28% increase in those with MSVI. The major causes of blindness in 2010 were; cataract 35%, other/unidentified causes 33.1%, refractive error 13.2%, macular degeneration 6.3%, trachoma 5.2%, glaucoma 4.4% and diabetic retinopathy 2.8%. In 2010, age-standardised prevalence of MSVI in Africa was 3.8% (95% CI 3.1% to 4.7%) for men and 4.2% (95% CI 3.6% to 5.3%) for women with subregional variations from 4.1% (95% CI 3.3% to 5.4%) in West Africa to 2.0% (95% CI 1.5% to 3.3%) in southern Africa for men; and 4.7% (95% CI 3.9% to 6.0%) in West Africa to 2.3% (95% CI 1.7% to 3.8%) in southern Africa for women.

Conclusions The age-standardised prevalence of blindness and MSVI decreased substantially from 1990 to 2010, although there was a moderate increase in the absolute numbers with blindness or MSVI. Significant subregional and gender disparities exist