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**Methods** A systematic review was conducted of published and unpublished population-based surveys as part of the Global Burden of Disease, Risk Factors and Injuries Study 2010.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.