

- Global issues

Blindness prevalence and cataract surgical coverage in Lumbini Zone and Chitwan District of Nepal

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Abstract

Aim To determine the prevalence of blindness, visual impairment and the cataract surgical coverage for people aged 50 years and older in the Lumbini Zone and the Chitwan District (Narayani Zone) of Nepal.

Methods A population-based cross-sectional study in 2006 selected subjects aged 50 years and older through a random multistage cluster sampling and door-to-door enumeration. Ophthalmic examination included visual-acuity assessment and refraction, and anterior and posterior segment examination of the eyes carried out by a trained ophthalmologist and two ophthalmic assistants at centralised locations.

Results The survey examined 5138 of 5196 persons enumerated (response rate of 86.8%). The mean age of the subjects was 61 (SD 9.2) years, and 2701 (52.6%) subjects were women. The age–sex-adjusted prevalence of blindness (best presenting vision <6/60) and visual impairment (better-eye presenting visual acuity of <6/18 to ≥6/60) were 4.6% (95% CI 3.4 to 5.8) and 18.9% (95% CI 16.4 to 21.4), respectively. Blindness was significantly lower in the hill (3.3%) compared with the plain (5.8%) regions (OR 0.6; 95% CI 0.4 to 0.9). The primary causes for blind eyes were cataract (n=228, 48.1%), refractive error (n=149, 31.4%), retinal disorders (n=19, 4.0%) and corneal opacity (n=18, 3.8%). The overall cataract surgical coverage was 66.6%. Cataract surgical coverage was not significantly associated with age, sex, literacy or District.

Conclusion Although the prevalence of blindness and visual impairment is lower than 10 years ago, particularly among women, correctable blindness due to cataract and refractive error (79.5% of blind people) remains a significant population health problem in Lumbini Zone and Chitwan District.