

The impact of lack of government insured routine eye examinations on the incidence of self-reported glaucoma, cataracts and vision loss

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PURPOSE: To determine the impact of lack of government insured routine eye examinations on the incidence of self-reported glaucoma, cataracts and vision loss.

METHODS: We analyzed data from the Canadian longitudinal National Population Health Survey (1994-2011) . White respondents aged 65+ in 1994/1995 were included (n=2618) . Three cohorts were established at baseline: those free of glaucoma, cataracts and vision loss (i.e. unable to see close or distance when wearing glasses or contact lenses) . Incident cases were identified through self-reporting of these conditions during the follow-up period.

RESULTS: The incidence (per 1000 person-years) of glaucoma was lower in uninsured provinces (8.1, 95% confidence interval [95%CI] 5.5-10.7) than in insured provinces (12.8, 95% CI 10.5-15.1) . The incidence of cataracts was also lower in the uninsured (67.2, 95% CI 55.7-78.6) versus insured provinces (75.7, 95% CI 69.2-82.2) . The incidence of vision loss was higher in the uninsured (26.6, 95% CI 20.2-33.0) versus insured provinces (22.5, 95% CI 20.0-25.5) . Adjusting for confounders, seniors in insured provinces had a 59% increased risk of glaucoma (incidence rate ratio [IRR] 1.59; 95% CI 1.07-2.37) , a 13% greater risk of cataracts (IRR 1.13, 95% CI 0.93-1.37) and a 12% reduced risk of vision loss (IRR 0.88, 95% CI 0.67-1.16) .

CONCLUSIONS: Lack of government-funded routine eye examinations is associated with a reduced incidence of self-reported glaucoma and cataracts, likely due to reduced detection. Lack of insurance is also associated with a higher incidence of self-reported vision loss, likely due to poorer access to eye care and late treatment.

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