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Trends in Socioeconomic Inequalities in Hypertension in Ontario, Canada, 2000-2012

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Introduction

Hypertension is leading risk factor for cardiovascular disease and mortality. Low socioeconomic position (e.g., income or high material deprivation) is an important risk factor for hypertension. However, there is limited evidence monitoring the extent to which socioeconomic inequalities in hypertension exist and are changing over time in Ontario.

Conclusion/Implications

Socioeconomic inequalities in hypertension were observed in Ontario, with decreasing trends between 2000 and 2012. Area-level material deprivation underestimated individual-level socioeconomic inequalities in hypertension.

Objectives and Approach

The study objective was to estimate socioeconomic trends in prevalent hypertension by household income and material deprivation in Ontario from 2000 to 2012. A pooled cross-sectional study was conducted using data from 6 Canadian Community Health Surveys linked to the Discharge Abstract Database and Ontario Health Insurance Plan data (n=121,390 over 35 years, 54% female). Relative-weighted Poisson regression models were used to estimate hypertension rates (adjusted for age, sex, ethnicity and immigration) across quintiles of equivalized household income and area-level material deprivation. Socioeconomic inequalities were estimated using the slope index of inequality (SII) and relative index of inequality (RII).

Results

Socioeconomic inequalities in hypertension were observed across income quintiles on both absolute (SII: 1428 per 10,000, 95%CI:1126,1730) and relative (RII:1.74, 95%CI:1.53,1.94) scales in 2000, decreasing by 2012 (SII:297 per 10,000, 95%CI: -82,676; RII:1.19, 95%CI:0.93,1.45). A similar pattern was observed across material deprivation quintiles, however with smaller inequalities in 2000 (SII:595 per 10,000, 95%CI:306,884; RII:1.25, 95%CI:1.11,1.39) and 2012 (SII:389 per 10,000, 95%CI:17,761; RII:1.24, 95%CI:0.99,1.49).