

7 Use of blood glucose-lowering drugs in Norway 2005-2013 – has the incidence of diabetes levelled off?

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Background

Diabetes constitutes a major public health challenge and numerous studies suggest that the prevalence is increasing in most countries. National estimates for the occurrence of diabetes are difficult to obtain, particularly time trends in incidence.

Objectives

To describe time trends in prevalent and incident use of blood glucose-lowering drugs by age group and gender in Norway over a time period.

Methods

Data were obtained from the nation-wide Norwegian Prescription Database including all prescriptions made by physicians dispensed from pharmacies to individual patients (encrypted) in open care. Person years for calculation of incidence rates were estimated from the mean population size for each gender, age-group and calendar year. Influence of age, gender and period were modelled by Poisson regression using STATA version 12.

Results

In 2013 a total of 165 315 patients, 3.3% of the population, had blood glucose-lowering drugs dispensed. The prevalence of oral antidiabetic drugs (OADs) use increased from 1.8% in 2005 to 2.5% in 2013, while the incident rate declined from 291 per 100,000 person years in 2006 to 263 in 2012. The declining trend in incidence of OAD use was observed particularly in those aged 70 years and older. Prevalence and incidence of insulin use were stable over time.

Conclusions

There was no increase in incident use of blood glucose-lowering drugs in Norway in the period 2006-2012, and even a decline in incident use of OADs in the elderly. This occurred despite an increase in prevalent use of OAD in the period 2005-2013. The prevalence and incidence of insulin use only was stable. This may signal that the increase in diabetes occurrence in Norway is levelling off, at least temporarily.