Abstract

Objective: Asthma and COPD are chronic respiratory diseases with a substantial disease burden. Only appropriate treatment and disease management can prevent symptoms and exacerbations, and improve quality of life. Data on Asthma and COPD in Switzerland are limited. The aim of our research is to assess the prevalence and treatment costs of asthma and COPD in Switzerland based on a variety of data sources.

Methods: Our analysis was mainly based on claims data provided by Helsana, a large health insurer, and on the Swiss Health Survey (SHS), a large and representative population survey. Individuals with asthma and COPD were identified based on the type of drugs purchased. Information on inpatient diagnosis, medical procedures and laboratory examinations were also used to improve the identification. Drug combinations derived from the GINA and GOLD guidelines were used to distinguish asthma from COPD and classify diseases by severity. Costs were assessed by degree of severity.

Results: We found an overall prevalence of treated asthma and COPD of 8.3% in Helsana data and of 3.8% in the SHS. We identified 57.02% as asthma patients, 10.70% as COPD patients, 0.31% as both asthma and COPD patients, and 31.97% as neither clearly asthma nor COPD patients. Regarding the disease severity in asthma patients, 45% were classified in GINA 1 an 1/2, 27% in GINA 3, and 25% in GINA 4 and 5. SHS identifies a large number of untreated asthma patients.

Conclusions: We find a similar age profile of the prevalence of treated asthma and COPD in health insurance claims data and the survey data. This validates our patient identification strategy in the claims data. Claims data are highly valuable for research, as they allow to assess the prevalence, severity, treatment and costs of diseases. A combination of claims data with other data sources has a huge potential to further improve the knowledge of disease epidemiology and costs in Switzerland.