

## **Abstract**

Smoking is a risk factor in relation to health and the negative effects on health are already well known. Despite that, the prevalence of smoking is still relatively high, and smoking causes many deaths from various diseases associated with tobacco use. These deaths could be prevented by effective prevention. Monitoring tobacco use is key for effective prevention. Therefore, various international and national studies monitor tobacco use and their results often differ. In this work I compare available sources of data on smoking, which are implemented in the Czech Republic over the last almost thirty years.

In this thesis, six repeated cross-sectional studies were analyzed. In order to compare studies with each other and the change over time, age-standardized prevalence of smoking was calculated for all studies analyzed. Binary logistic regression was used for more detailed comparisons. Furthermore, differences in social inequalities assessed based on education between the analyzed studies were identified.

Statistically significant differences in the prevalence of smoking were found between the analyzed studies. Furthermore, different directions of trends in the development of smoking prevalence over time were also found in individual studies. A declining trend for both sexes was found only in the HIS / EHIS study. Differences between studies were also found in the prevalence of smoking by education levels. In all studies was confirmed that education is related to the prevalence of smoking, and respondents with lower education have a higher prevalence of smoking than those with higher education. However, the relative differences by the educational levels were significant between the studies.

These differences can be caused by many possible sources of bias. The studies differ in the methods used and in the formulation of questions used to determine smoking. These differences were found not only across studies, but also within one study over time. Therefore, when determining the prevalence of smoking, it is important to keep in mind that the results may vary depending on the source used.

**Keywords:** Smoking, tobacco, prevalence, comparing studies, trends, social inequalities, Czech