

## **Development of mortality on diabetes mellitus in developed countries, focusing on the Czech Republic**

### **Abstract**

This thesis addresses the development of diabetes mellitus mortality in selected developed countries between 1950 and 2008 and compares this development with the situation in Czechoslovakia, the Czech Republic respectively. This development is analyzed by sex, age and type of diabetes. Furthermore it also deals with diabetes morbidity and the share of diabetes mortality from the total mortality. The main approach used in this thesis is analysis of standardized mortality rates and this analysis was done both for whole long-term time series and time series within each International Classification of Diseases for individual countries. Based on the results, it was found that the development of diabetes mellitus mortality was similar across selected countries. It could be divided into several phases. Differentiation between mortality rates of males and females that occurred during reference period was so significant that mortality rates of females which were always higher had dropped below the rates of males. This effect is called in this thesis as a transition from higher female mortality to higher male mortality and it occurred in different countries at different times and also had variable-length course. It was found that there was a shift in the mortality of diabetes mellitus to the higher age groups. Another important finding was that scale of mortality on type 1 diabetes mellitus was diminished to the type 2 diabetes mellitus.

Overall, it was found that mortality from diabetes mellitus is increasing its share in overall mortality and that the morbidity of diabetes had also increased. Important finding was that Czechoslovakia or the Czech Republic did not differ significantly from the rest of the countries.

**Keywords:** diabetes mellitus mortality, type 1 diabetes mellitus, type 2 diabetes mellitus, diabetes mellitus, mortality, morbidity, Czech Republic, Czechoslovakia, developed countries, International Classification of Diseases, diabetes mellitus definition, WHO