## **SUMMARY**

The thesis is based on three cross-sectional studies.

The first study analyzed long-term trends in caries experience of Czech 5yr olds. The data originated from 6 studies on caries experience of 5yr olds performed over the years 1994-2009. During this period, a significant increasing trend in dmft=0 was observed in Czech 5yr olds, the trends of mean dmft per child and mean d per child were not significant.

The aim of the second study was to characterize family attitudinal and behavioural factors related to dental decay prevention. It was a questionnaire survey in parents of preschool children. The data was analyzed by factor analysis enabling to find latent associations among large number of variables with similar variability and group them into a smaller set of newly formed factors. The results showed that the parents have sufficient knowledge on the main risk factors for dental caries, however, in the caries prevention they mainly rely on dentists, they consider it normal to give sweets to children daily and they underestimate the seriousness of premature loss of primary tooth.

The third study used logistic regression to analyze the relationship of parental locus of health control (LoC) and the risk of dental caries in primary dentition of their preschool children. It was observed that children of parents with the strongest LoC were more than twice more likely to be free from untreated caries and to have intact teeth in comparison to the children of parents with the weakest LoC, after adjusting for the effect of age and sex of the child, parental age and marital status and education of the mother.