

# Improvements in the Aging Population 1968-1991: Trends in Mobility and Dental Status

*Akademisk avhandling som för avläggande av filosofie doktorsexamen vid Stockholms universitet  
offentligen försvaras i Aula Svea, Sveaplan onsdagen den 5 juni 2002, kl. 10.00*

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Stockholm 2002

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ISBN 91-7265-454-6

## **Abstract**

The dissertation describes the distribution of poor dental status (edentulousness or teeth with many fillings rather than teeth in good condition) and mobility limitations (difficulties with running, walking and stairs) in the Swedish population between 1968 and 1992. It also examines some of the possible explanations to the health improvement over time in these two areas.

Empirical analyses were based on a series of interview surveys collected in 1968, 1974, 1981, and 1991/1992. Each wave was a nationally representative sample of the population aged 18-75. In 1992 an additional sample included persons aged 76-98. The survey was a panel design, which made it possible to construct three comparable longitudinal samples, 1968-1974, 1974-1981, and 1981-1991. Analyses compared rates of mobility limitations and different dental statuses by age, sex, and social class. To evaluate changes, logistic regressions estimated differences between groups. In longitudinal analyses predictors and baseline dental status were taken from prior survey waves.

Study I describes a considerable decrease in the age specific rates of edentulousness, and a smaller increase of the rates of people with teeth in good condition between 1968 and 1991. Among the older age groups it was foremost the proportion of people who had teeth with many fillings, crowns, and bridges that increased.

Study II shows that between 1968 and 1991 the relative social class differences in dental health decreased. Class differences were most pronounced in the oldest age groups. Results suggest that this increased equity was a result of the oldest cohorts leaving the survey.

Study III's longitudinal analyses confirm that the cross-sectional over time comparison (in Study 1) did not overestimate the dental health improvement between 1974 and 1991. Between 1968 and 1991 the social patterning of dental health continued to be reproduced in new cohorts. In opposition to cross-sectional results, longitudinal analyses showed that social class differences decreased mainly before 1974, when the Swedish national dental health insurance scheme was introduced. Some of the decrease in edentulousness could be explained by an increase in dental care utilization.

Study IV describes how the proportion of people with mobility limitations starts to increase after age 40 and then there is a successive increase in limitations with age. Gender and social class patterns were already visible before age 50; women and blue-collar workers have more limitations. Between 1968 and 1991 the age specific rates of mobility limitations were reduced. Relative gender differences decreased in mobility limitations, while class differences remained.

Study V shows that the reduction in rates of mobility limitations in the population correlated with concurrent social class and gender related changes. Between 1974 and 1991 the changes in the effect and the composition of the classes and women's participation in the labor market could account for almost all improvement. In addition, earlier changes in health behavior predicted the later changes in mobility rates. Physical activity increased, contributing to improvement. There was no relation between smoking in 1968 and mobility in 1974, while smoking in 1981 was related to mobility in 1991. This suggests that if everybody had been a non-smoker improvement would have been even greater.