

Oral Health in Swedish Women

Impact of social and psychological factors over time

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- I. Wennström A, Ahlqwist M, Stenman U, Björkelund C, Hakeberg M. **Trends in tooth loss in relation to socio-economic status among Swedish women, aged 38 and 50 years: repeated cross-sectional surveys 1968-2004.** BMC Oral Health. 2013; 13:63. doi: 10.1186/1472-6831-13-63
- II. Wennström A, Wide Boman U, Stenman U, Ahlqwist M, Hakeberg M. **Oral health, sense of coherence and dental anxiety among middle-aged women.** Acta Odontologica Scandinavica. 2013; 71: 256-62. doi: 10.3109/00016357.2012.671362
- III. Wide Boman U, Wennström A, Stenman U, Hakeberg M. **Oral health-related quality of life, sense of coherence and dental anxiety: An epidemiological cross-sectional study of middle-aged women.** BMC Oral Health. 2012; 12:14. doi: 10.1186/1472-6831-12-14
- IV. Wennström A, Wide Boman U, Ahlqwist M, Björkelund C, Hakeberg M. **Perceived mental stress in relation to oral health over time among Swedish middle-aged women.** Accepted September 21st for publication in Community Dental Health, 2015.



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ABSTRACT

The overall aim of this thesis was to gain knowledge about the development of oral health among Swedish women in Gothenburg, 38 and 50 years of age, from 1968/69 to 2004/05, and to elucidate possible impacts of psychosocial factors on oral health.

The specific aims were **(I)** to describe secular trends over time concerning oral health, with regard to number of teeth and socioeconomic status (SES); **(II)** to analyze the relationship between sense of coherence (SOC), dental anxiety (DA) and oral health, measured both subjectively and objectively, and adjusted for SES, in 2004/05; **(III)** to evaluate how oral health-related quality of life (OHRQoL) was related to SOC and DA, subjective oral health, dental care behavior and SES in 2004/05; **(IV)** to analyze perceived mental stress in relation to oral health over time, including considerations concerning smoking and SES. The four scientific papers in this thesis all apply a cross-sectional design.

Results: Paper I revealed a dramatic increase in improved oral health during the 36-year period. The middle-aged women had more remaining teeth and almost none were edentulous in 2004/05 compared with 1968/69. SES also improved, even though inequalities remained over time, and showed better oral health among women with higher SES. Perceived mental stress (**Paper IV**) increased remarkably over time, but was not associated with oral health. However, the analysis showed fewer decayed teeth, less periodontal disease and more remaining teeth in the later examination year in 2004/05 than in 1968/69. Oral health was associated with different social and psychological factors (**Papers II, III**). A strong SOC (**Paper II**) was found to have a protective effect against poor objective (50-year olds only) and subjective oral health, and high DA. A gradient was seen; the lower the SOC scores the lower the SES. DA was related to both poor self-reported and objective oral health. Poor OHRQoL (**Paper III**) was associated with high DA, low SES, irregular dental behavior and poor subjective oral health. A weak SOC and high DA were predictable of poor OHRQoL.

Conclusions: Oral health and socioeconomic status improved over 36 years, but inequalities still remained over time, with better oral health among middle-aged women with higher socioeconomic status. Perceived mental stress increased over time, but was not associated with oral health. The study in 2004/05 showed that a strong SOC, low dental anxiety and good OHRQoL indicated a protective effect on oral health. Low socioeconomic status was related to a weak SOC, high dental anxiety and poor OHRQoL.

Keywords: oral health, socioeconomic factors, number of teeth, sense of coherence, oral health-related quality of life, dental anxiety, women's health, epidemiologic studies, psychological stress, periodontal disease, smoking.

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