Commentary

Commentary to the paper ‘Midlife cognitive ability, education, and tooth loss in older Danes’

The proportion of the population surviving to a very high age is increasing and the mortality among the oldest old is only half that of was 50 years ago, in the developed countries [1]. This is a positive trend, but for preventive purposes it is important to identify risk factors for physical and cognitive impairment. Poor oral health is a common condition among the oldest old and can be a result of periodontal disease and dental caries. Tooth loss can result in pain and often lead to reduced quality of life, social isolation, and inadequate nutrition due to problems with chewing and swallowing. Oral health diseases are more often seen in people with poorer cognitive ability [2], low education [3], and lower income [4]. These factors may associate to risk behaviors related to health beliefs and lifestyles, including dental care during the life course.

With the study ‘Midlife Cognitive Ability, education, and Tooth Loss in Old Danes’ we demonstrate the association between midlife cognitive ability and education (at ages 50 and 60) and late life tooth loss (at age 70).

Danish men and women (n=302) from the Glostrup 1914 Birth Cohort were included. Cognitive ability was assessed using Wechsler's Adult Intelligence Scale at age 50 and 60. Information on education was gathered using a questionnaire at age 50 and 60. Clinical oral examination took place at age 70, and oral health was measured according to number of teeth.

Cognitive ability and educational attainment was as expected associated with number of teeth. Furthermore, the study revealed that an interaction between cognitive ability and educational attainment on number of teeth was highly significant. Those with higher cognitive ability tended to have higher educational attainment and these individuals had significantly lower odds for losing their teeth [5].

The findings in this study may relate to socioeconomic factors as well as other factors, and these remains to be studied.

Preservation of a healthy and well-functioning body and cognitive function is essential for maintaining the quality of life. Several western countries have preventive oral health programs for children, but programs or reimbursement possibilities for adults are not prioritized. Implementation of oral health promotion programs for adults are needed for facing the increased burden of oral diseases among older people and such programs should consider the increased risk associated of poor oral health with low cognitive ability and low education, physical as well as in terms of quality of life.

References