Oral health-related quality of life and mortality: prospective cohort study of Japanese dentists

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【Aims】
❖ To date, there are few studies on oral health-related quality of life (OHQOL) and mortality, while data in the literature showed health-related quality of life measure was one of the predictors of mortality.
❖ This study aimed to assess whether OHQOL could predict total mortality in men and women.

【Methods】
❖ The baseline data from the Longitudinal Evaluation of Multi-phasic, Odontological, and Nutritional Associations in Dentists (LEMONADE) study was analyzed. A baseline survey was conducted from 2001 to 2006 among dentists of the Japanese Dental Association. A total of 10,114 Japanese dentists (mean age ± standard deviation [SD], 52.4 ± 12.1 years) were included in the analysis.
❖ A self-administered questionnaire requested that respondents provide lifestyle data. The questionnaire included the General Oral Health Assessment Index (GOHAI) for measuring OHQOL. Lower GOHAI scores than the Japanese norm (GOHAI score=53.1) was defined as having poor OHQOL.
❖ Using Cox proportional-hazard models, hazard ratios (HRs) and 95% confidence intervals (CIs) were calculated after adjusting for age and other potential confounding factors.

【Results】
❖ The mean GOHAI scores were 54.5 (SD = 6.3) among men, 55.0 (SD = 5.7) among women. The GOHAI scores were inversely associated with age in men and women (trend P < 0.001).
❖ The mean follow-up period was 7.7 years. We identified a total of 427 (4.6%) deaths in men and 33 (3.7%) deaths in women, during follow-up.
❖ Men with poor OHQOL at baseline showed increased total mortality risk. The multivariate HRs for total mortality for men and women with lower GOHAI scores than the Japanese norm versus others were: 1.43 (95% CI, 1.16–1.76) and 1.26 (95% CI, 0.56–2.84) for total mortality.
❖ The risk for total mortality was attenuated after further adjustment for the number of teeth lost (HR for women, 0.99; 95% CI, 0.42–2.32), however, the difference remained significant in men (HR, 1.40; 95% CI, 1.13–1.73).

【References】
LEMONADE Study  http://www.med.nagoya-u.ac.jp/yobo/lemonade/lemonade/article.html


Conclusion

Our findings suggest that OHQOL is independently associated with total mortality in men. Oral health status may give effect on not only physical but psychological or social factors in general health.