

# The interdependency of dental anxiety and oral health-related quality of life in Switzerland

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## Introduction & Aim

- To collect epidemiological data of dental anxiety and oral health-related quality of life for an older adult population in Switzerland (at the University of Bern).
- To assess the impact of anxiety on oral health and on patients' self-perceived quality of life.

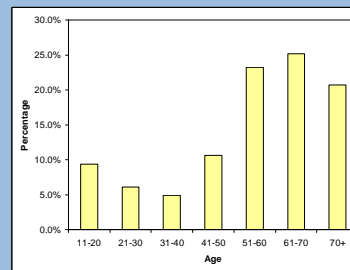
The hypothesis tested whether dental anxiety and phobia would directly affect oral health negatively.

## Materials & Methods

Three dental anxiety questionnaires were used:

- The dental anxiety scale (**DAS**, Corah, 1969).
- The DAS-based hierarchical anxiety questionnaire (**HAQ**, Jöhren, 1999) which specifically considers the fear of certain treatment situations.
- The visual analogue scales (**VAS**, Aitken, 1969) as a graphical alternative to categorizing questionnaires.

Oral health-related quality of life was measured with the German version of the 14 item Oral Health Impact Profile (**OHIP**, Slade und Spencer, 1994).



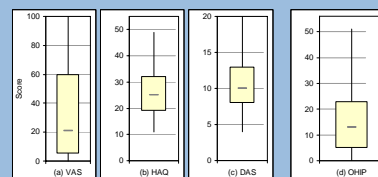
118 women (50.6%) and 115 men (49.4%) participated in the study conducted at the University of Bern, Switzerland, with 69.1% of them above the age of 50.

## Results

A comparison of answers regarding oral health (OHIP) and dental anxiety (DAS, HAQ, VAS) showed a clear interdependency. **Highly anxious patients according to HAQ reached significantly higher scores ( $p < 0.001$ ) in VAS, DAS, and OHIP than moderately or little anxious ones.** The average little anxious patient according to HAQ reached an OHIP score of  $13.2 \pm 11.0$  while the average highly anxious patient reached one of  $25.4 \pm 14.1$ .

A further analysis with a Kruskal-Wallis test, dividing patients into age groups, showed a correlation between age and questionnaire scores with  $p_{VAS} = 0.005$ ,  $p_{HAQ} = 0.005$ ,  $p_{DAS} = 0.040$  und  $p_{OHIP} = 0.013$ .

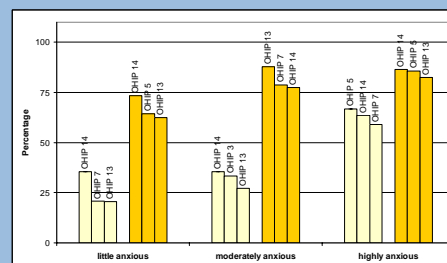
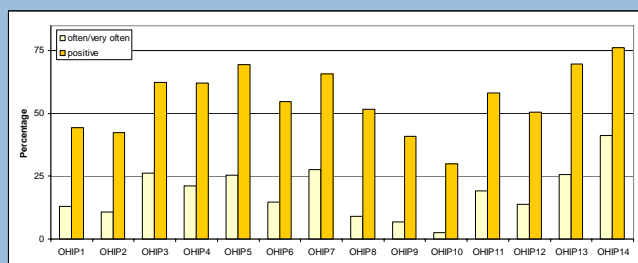
No significant differences in answers between women and men could be established.



The average degree of fear according to HAQ was  $25.8 \pm 9.5$ .

The average DAS score was  $10.4 \pm 3.8$  and the one for VAS  $33.2 \pm 32$ .

The average OHIP score was  $15.7 \pm 12.6$ .



Patients older than 50 years are less fearsome of dental treatment while their higher OHIP scores indicated – as was to be expected – more oral health-related problems. The specifically quality-of-life targeted OHIP question 3 showed a high correlation to the anxiety groups in all three dental anxiety questionnaires: highly anxious people answered it positively more often than little anxious ones.

## Conclusion

Concluding the study, the hypothesis stated above could be confirmed: dental anxiety is associated with the impact of oral health-related quality of life. Those expressing higher levels of dental fear are among those with poorer oral health-related quality of life. However, with higher age, this trend seemed to lessen.