



Prevalence of Periodontitis in 70-Years Old in Western Norway



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Background

A high burden of periodontitis has been reported in Sweden, Denmark, and Norway, probably due to an increasing age of the population, an increased tooth retention rate, and the cumulative nature of periodontitis. The lack of consistent case definition hinder a definite comparison of periodontal status across epidemiological studies and over time.

Objectives

The aim of the present study was to assess the prevalence of periodontitis in an elderly cohort (born in 1950-1951) from Western Norway, by using two different periodontitis case definitions.

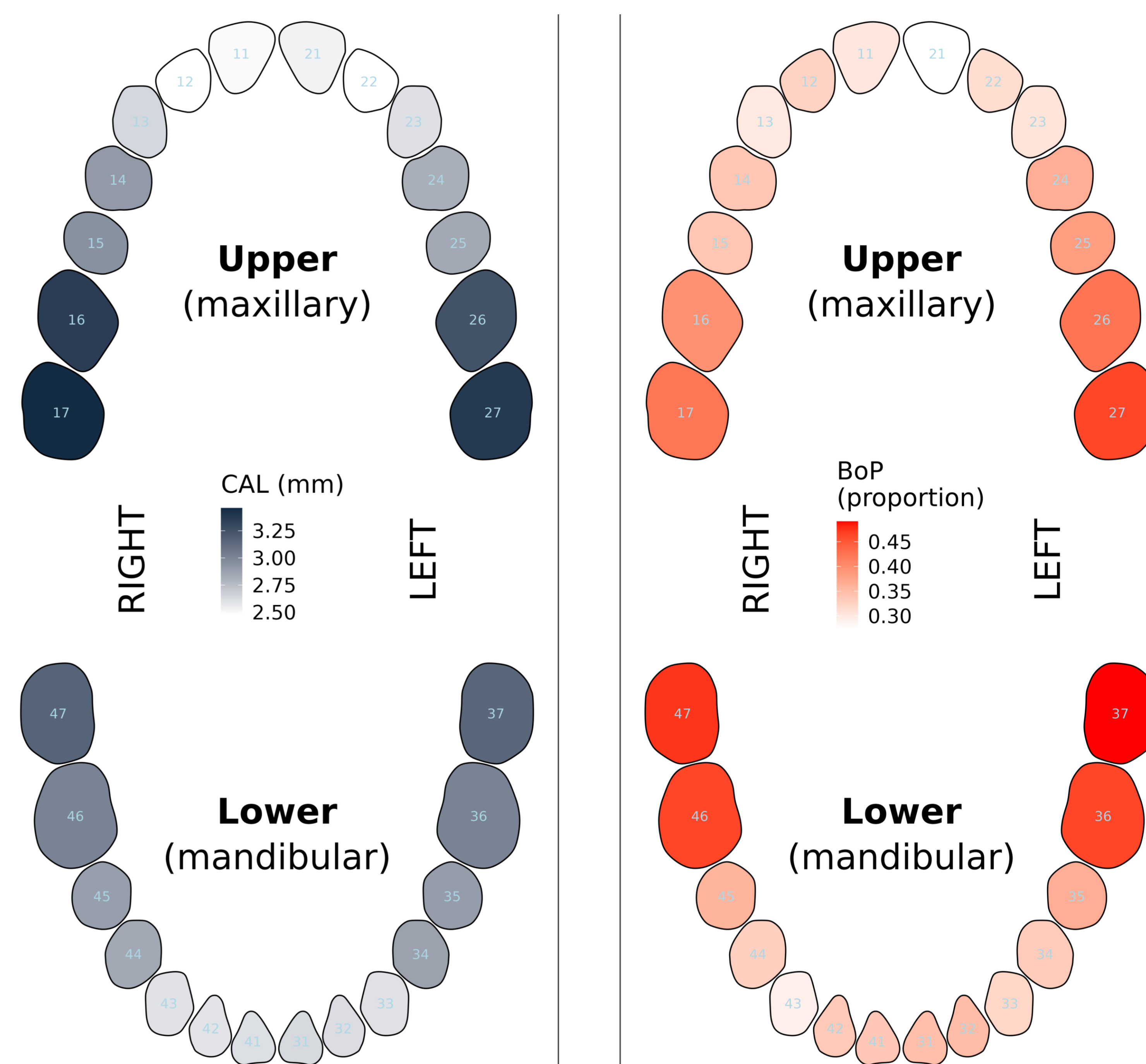
Material and methods

This cross-sectional study was based on data from an oral health screening examination and a health survey (HUSK-3) in Western Norway. Periodontal conditions were assessed for 1298 adults with at least two natural teeth. Probing depth and gingival recession were measured from six sites per tooth and clinical attachment loss (CAL) was recorded. Bleeding on probing (BOP) was registered at six sites per tooth. Self-reported history of diabetes and tobacco use were collected from questionnaires. The 2018 EFP/AAP periodontitis classification criteria and the diagnostic criteria by Eke et al.2012 (CDC/AAP) were used for case definition. This project supported by Norwegian Research Council 318443.

Results

According to the 2018 classification and Eke et al 2012, the majority of the participants were in Stage III (61%) and moderate periodontitis cases (65%), respectively. Smokers and diabetic participants were over-represented in stage III/IV and in the moderate/severe periodontitis group. Severe periodontitis was more prevalent in males than in females. In participants with periodontitis in Stage II, III, or IV mean BOP were 23.70%, 38.58%, and 45.75%, and with moderate and severe periodontitis, 33.88% and 49.04%, respectively. In total, 85.3% of Stage III and 97.4% of Stage IV participants demonstrated localized periodontitis.

| Periodontitis case definitions | All Participants N=1298 N (%) | Female N=706 N (%) | Male N=592 N (%) |
|--------------------------------|-------------------------------------|--------------------------|------------------------|
| EFP/AAP | | | |
| No periodontitis/Stage I | 46 (3.54) | 32 (4.53) | 14 (2.36) |
| Stage II | 230 (17.72) | 140 (19.83) | 90 (15.20) |
| Stage III | 790 (60.86) | 441 (62.46) | 349 (58.95) |
| Stage IV | 232 (17.87) | 93 (13.17) | 139 (23.84) |
| CDC/AAP | | | |
| No periodontitis/Mild | 103 (7.94) | 68 (9.63) | 35 (5.91) |
| Moderate | 846 (65.18) | 484 (68.56) | 362 (61.15) |
| Severe | 349 (26.89) | 154 (21.81) | 195 (32.94) |



Periodontal measures at different teeth, measured at population level. A darker colored tooth indicates higher population mean.

Conclusions

This study shows a very high burden of periodontitis in older adults, with more than 92% of the present population affected. The majority of the participants with Stage III and IV periodontitis demonstrated localized periodontitis.