Periodontal health knowledge and awareness among subjects with fixed orthodontic appliance

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Objective: To report on periodontal health knowledge and awareness among orthodontic patients and to investigate the effect of age, attitude and duration of orthodontic treatment on periodontal health awareness among orthodontic patients.

Methods: A total of 297 orthodontics patient (90 males, 207 females) with mean age of 17.7 ± 5.0 years (older then 18 years = 119, 18 years or younger = 178) were included in this study. Subjects were currently wearing upper and lower fixed orthodontic appliances for a mean period of 12.55 ± 10.86 months (less than or equal to 18 months = 231, more than 18 months = 66). Data was collected through a self-administered questionnaire (demographic characteristics, subjects' awareness toward their periodontal health, periodontal knowledge among orthodontic patient and patients' attitude toward orthodontic treatment regarding periodontal health) and clinical periodontal examination.

Results: Periodontal knowledge was poor among orthodontic patients in relation to dental plaque. Only 24 subjects (8%) correctly answered knowledge-related questions. Adult orthodontic patients reported negative attitude toward fixed orthodontic treatment in respect to periodontal health ($p<0.001$). Duration of orthodontic treatment negatively affected subjects' attitude toward fixed orthodontic treatment ($p<0.01$). The majority of subjects were in the high level of awareness group (64%). Orthodontic patients' awareness toward their periodontal health during fixed orthodontic treatment was affected by attitude scores ($p=0.005$), number of teeth with gingival recession ($p=0.041$), Gingival Index ($p=0.000$), duration of treatment ($p=0.047$) and age ($p=0.008$).

Conclusions: Periodontal health knowledge among orthodontic patients was poor. Orthodontic patients' awareness of their periodontal health was moderate and was affected by age, attitude and duration of orthodontic treatment.

Keywords: Awareness. Attitude. Orthodontic. Periodontal health.