Abstract: Objective. To investigate the association between orthodontic treatment need (OTN) and caries experience (CE). Subjects and methods. Using a stratified sampling method, 748 subjects (355 females, 393 males; mean ± standard deviation age 15.11 ± 2.23 years) were examined. The Dental Aesthetic Index (DAI), DMFT, simple (DMFT > 0) and severe CE (DMFT > 8) were recorded. Socio-economic status (SES) was assessed by recording parental education, mother's employment status, and household size. Data were analyzed in SPSS software. Results. Higher (but not statistically significant) CE was observed in subjects with OTN (DAI > 30). The association between DAI and DMFT scores was not significant (rho = 0.05). Mean DMFT score did not vary significantly between the SES and OTN subgroups. In children with a household size >6 persons, OTN was associated with higher CE and a higher prevalence of severe CE compared with those without OTN. In this group, when DAI treatment need grade increased, severe CE prevalence also increased from 10.8% to 50%. Similarly, in those with OTN and household size >6 persons, the odds of observing subjects with severe CE was 4.6 times higher (95% confidence interval 1.45–14.55) compared to those without OTN. Conclusions. Associations were observed between OTN and CE and also between the prevalence of severe CE and the severity of malocclusion in children with a household size >6 persons. The current findings suggest that the relationship between caries experience and malocclusion should be assessed in a wider context of SES and background factors.

Caries experience, Dental Aesthetic Index, DMFT, socio-economic status, orthodontic treatment need

Presentation: Oral