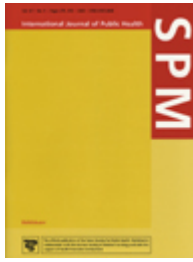


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Relationship between caries prevalence and fissure sealants among 12-year-old German children at three educational strata

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Summary Objectives: To investigate the relationship between caries prevalence and fissure sealants among 12-year-old German children at three educational levels.

Methods: In 1998 a cross-sectional investigation which comprised 60 % of the 12-year-old children was performed in Heidelberg, Germany. The children attended three types of schools: Gymnasium, Hauptschule, and Realschule. The children received a dental examination. Teeth with caries experience were recorded according to WHO criteria, and teeth with a fissure sealant were also noted.

Results: The mean number of fissure sealed teeth per child was 2.49 (Gymnasium), 2.31 (Realschule) and 1.17 (Hauptschule). In children who attended a Gymnasium the mean DMFT scores were the lowest (0.87 in children with fissure sealant and 1.31 in children without fissure sealant). The corresponding values for children who attended a Realschule were distinctly higher. The highest mean DMFT scores (2.14 and 3.48, resp.) were observed in children who attended a Hauptschule. The proportion of caries-free children was higher in all three types of school when fissure sealants were present.

Conclusions: In spite of a high prevalence of fissure sealants there is an unequal caries experience among 12-year-old children from different educational strata. To improve this situation, persons important to promotion of dental health should do all their part to ensure that fissure sealants are applied to permanent teeth as early as possible, especially when children have caries experience in their primary dentition.

Caries prevalence - Fissure sealants - Socio-economic status - Educational level - Germany