

Enamel opacities in schoolchildren in the Rhine-Neckar-district, Germany
MJ KOCH*, B KUKSEN, U NIEKUSCH.
Poliklinik für Zahnerhaltungskunde, MZK-Klinik des Universitätsklinikums,
Heidelberg, Germany

The aim of this study was to examine the prevalence of opacities in the dental enamel of migrants and non-migrants. School children (n=849) from five different schools in the Rhine-Neckar district were examined. The examination of all permanent teeth for diffuse opacities (DIFF) or demarcated opacities (DEM) in the enamel was performed using the diagnostic criteria of the DDE Index. Parents were asked to complete a questionnaire to determine where they and their child were born. Three different groups were defined: "Group A" if both of the parents and the child were born in Germany, "Group B" if the child was born in Germany and one or both of the parents were born outside, and "Group C" if the child was born outside Germany, regardless of its parents' country of origin. The groups were constituted as follows: group A n=563, group B n=163 (in which 46% of the parents came from Turkey, 18% from Italy, 4% from Lebanon; these were the three main countries of origin) and group C n=117 (37% from the Balkans, 15% from Turkey, 14% from the former Soviet Union). In Group A, 50.1 % of the children studied were found to have at least one tooth which exhibited opacities. This figure was 46.7% for group B, and 37.6% for group C. An analysis of contingency tables by χ^2 -tests revealed a statistically significant difference between the three groups ($P=0.031$). DIFF's were discovered in 16.6% of the children in group A, 15.8% of those in group B, and 11.4% of group C. The figures for DEM's were 38.5% (group A), 36.1% (group B), and 28.2% (group C). After Bonferoni adjustment was made, no statistically significant differences could be found between the groups. However, the prevalence of opacities in children born outside Germany tends to be lower. It is concluded that the relationship between migration and the prevalence of enamel opacities needs further research.