Determinants of children's exposure to environmental tobacco smoke (ETS): a study in Southern Germany.

Abstract:
Maternal smoking has been repeatedly found to be the most important determinant of children's exposure to environmental tobacco smoke (ETS). Here, we further investigated predictors for the urinary cotinine/creatinine ratio (CCR, ng/mg) in 1220 preschool children for the year 1996. Children from smoking homes (35.1%) had significantly higher CCR than children from nonsmoking homes (mean: 55.5 vs. 14.9 ng/mg). The level of education of the parents was a strong predictor for CCRs even after adjusting for number of cigarettes smoked, maternal smoking and dwelling space. Additionally, dwelling space was inversely related to children's urinary cotinine level. The CCR levels in children investigated in 1996 and 1998 were significantly correlated (Pearson's r=0.67). The parents of 806 children agreed for a visit to their homes. In 79 of the 536 (14.7%) of the self-reported, nonsmoking households, smoking was admitted during the visit. The mean urinary CCR of these children was 25.2 ng/mg. We conclude that in addition to parental smoking behaviour, other variables such as dwelling space and social and educational status predict the children's exposure to ETS. Our data also revealed that a considerable percentage of parents denied the ETS exposure of their children at home.