

# SOCIOECONOMIC STATUS AND ENVIRONMENTAL TOBACCO SMOKE EXPOSURE OF CHILDREN IN KOREA.

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**Background and Aims:** Exposure to environment tobacco smoke (ETS) can have serious health consequences, especially for children. It was reported that most of ETS exposure occurred at home and lower parental socioeconomic status (SES) increased a risk of ETS exposure at home. This study aims to investigate the relationship between individual level SES of parents and children's ETS exposure, to examine the effects of individual level SES depending on the characteristic of residential areas, and to evaluate the interactive effects of area level and individual level SES in Korea.

**Methods** Whether ETS exposure was associated with parental SES was evaluated using information on 7,059 children aged 6–13 years from the Children's Health and Environment Research (CHEER) study in Korea. First, bivariate and multivariate associations between parental SES and children's ETS exposure were examined using logistic regression analysis. Secondly, to evaluate the effects of parental SES on children's ETS exposure by deprivation level of residential areas, we estimated the model including the interaction term of deprivation level of residential areas with parental SES.

**Results:** After adjustment for possible confounding variables, paternal education was found to be highly correlated with children's ETS exposure, especially among children whose father had less than 12 year education living in the most deprived area (Odds ratio=2.82, 95% CI=(2.02–3.94)).

**Conclusions:** Our findings suggest that characteristics of residential areas may influence ETS exposure of children directly and interactively with parental SES in Korea. Findings from this study could inform policy decision making of evidences regarding the associations of community as well as individual level socioeconomic factors with ETS.

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