Abstract

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We examined the association between early childhood exposure to maternal smoking and behavioral issues at 8 years old using a large nationwide population-based longitudinal survey in Japan that began in 2001. We included 46,737 children with information about maternal smoking taken from the 6-month survey. We used logistic regression analysis to examine the hypothesis. Early childhood exposure to maternal smoking increased the risk of behavioral problems related to attention and aggressive or disruptive behavior. The adjusted odds ratios (95% confidence intervals) were 1.37 (1.22–1.54) for inability to wait their turn during play and 1.40 (1.27–1.55) for destroying toys and, compared with children of non-smoking mothers. Children of mothers who were heavy smokers were more likely to develop behavioral problems than others. Stopping early childhood exposure to maternal exposure can protect children's neurodevelopment.

Keywords

Early childhood exposure; Epidemiology; Smoking; behavioral problems

Abbreviations:

CI: confidence interval; OR: odds ratio; JMHLW: Ministry of Health, Labour, and Welfare in Japan; CBCL: Child Behavior Checklist