Abstract

The objective of this study is to describe the differences in the exposure to secondhand smoke (SHS) at home and at leisure time according to the day of the week (working and non-working day) which exposure occurs in Barcelona. We carried out a cross-sectional study of a representative sample of adult (>16 years) non-smokers in Barcelona before the Spanish smoking law came into effect (years 2004-2005). We studied the prevalence of exposure to SHS at home and leisure time by means of a questionnaire and a biomarker (salivary cotinine). The questionnaire included questions on exposure to SHS on working days and non-working days. The prevalence of exposure to SHS at home was 27.4% (6.8% exposed only on working days, 5.7% exposed only on non-working days, and 14.9% exposed on both working and non-working days). The prevalence of exposure to SHS at leisure time was 61.3% (10.7% exposed only on working days, 13.6% exposed only on non-working days, and 37.0% exposed on both working and non-working days). The exposure to SHS only on non-working days at leisure time decreases with age ($\chi^2$ of trend = 183.7; p<0.001) and increases with the educational level ($\chi^2$ of trend = 78.8; p<0.001). Participants who had reported to be exposed to SHS at home on working and non-working days showed higher levels of salivary cotinine concentration, regardless of sex, age group, and educational level. In conclusion, the exposure to SHS occurs mainly during leisure time. Questions on SHS exposure according to working and non-working days allow to characterizing the exposure to SHS, especially when the exposure occurs at leisure time.

Keywords

Environmental tobacco smoke, secondhand smoke, cotinine, biomarker, general population, cross-sectional study, questionnaire