

## **Maternal exposures and risk of spontaneous abortion before and after a community oriented health education campaign.**

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**BACKGROUND:** In a district of Veneto (North-east Italy) where numerous females of childbearing age were occupationally exposed to organic solvents in nearly 400 shoe factories, a case-control study found significant associations between maternal exposures (from occupation and risky behavior) and spontaneous abortion (SAB). Thereafter, a health education campaign was undertaken to increase awareness of risk factors for pregnancy in the population. To evaluate the effects of this campaign maternal exposures and SAB risks were compared before and after the campaign.

**METHODS:** Hospital records were collected from a local hospital for SAB cases and age-residence-matched controls with normal deliveries. Information on solvent exposure, coffee and alcohol consumption, smoking and the use of medication was collected using a questionnaire. Before and after differences were tested through a modified Chi-square test and linear and logistic regressions for survey data. Odds ratios (ORs) with 95% confidence interval (CI) were estimated using logistic regression models.

**RESULTS:** The consumption of coffee ( $P = 0.003$ ) and alcohol ( $P < 0.001$ ) was lower after than before the campaign, controlling for age at pregnancy and level of education. There were no differences in reported solvent exposure or smoking (smokers were few). The previously detected increased risks of SAB in relation to solvent exposure and coffee consumption were no longer present.

**CONCLUSION:** The results suggest that health education campaigns might reduce harmful maternal exposures and the risk of SAB.

**FULL TEXT PER GLI UTENTI REGISTRATI ALLA RIVISTA**

<http://eurpub.oxfordjournals.org/content/early/2010/06/09/eurpub.ckq073.abstract>