

International Conference on
CELL AND STEM CELL RESEARCH
&
International Conference on
MEDICAL AND SURGICAL NURSING

August 17-18, 2018

Singapore City, Singapore

Effect of passive smoking on risk of preterm birth in urban china: A prospective cohort study

Xi Chen¹, Chunrong Zhong¹, Renjuan Chen¹, Qian Li¹, Li Huang¹, Xuezheng Zhou¹, Chaoqun Liu¹, Mei Xiao², Zhichun Jin², Guoping Xiong³, Jing Wang⁴, Xuefeng Yang¹, Liping Hao¹, Hongying Yang⁵ and Nianhong Yang¹

¹Huazhong University of Science and Technology, China

²Hubei Maternal and Child Health Hospital, China

³The Center Hospital of Wuhan, China

⁴Maternal and Child Health Hospital of Jiang'an District, China

⁵Hubei Center for Disease Control and Prevention, China

Active smoking by pregnant women has been known to be a risk factor for preterm birth, and we aim to explore whether stopping or continued exposure to passive smoking in early pregnancy confers a risky effect on preterm birth. Data from a large, prospective study in Wuhan, China were used for analyses. Multivariate logistic regression yielded odds ratios (AORs) for preterm birth (before 37 weeks) associated with passive smoking. Additive interaction was tested by calculating the relative excess risk due to interaction (RERI). Among the 6301 nonsmoking women, 988 (15.6%) were exposed to passive smoking before pregnancy, and 41.6% of whom continued their exposure. There were 269 (4.3%) preterm births in all. Compared with no passive smokers, the adjusted odds ratios (AOR) (95%

confidence interval (CI)) were 1.17 (0.76, 1.82) for women who stopped passive smoking in early pregnancy, and 1.65 (1.06, 2.58) for women who continued passive smoking. In addition, jointed to current passive smoking, husband smoking showed the increased risk of preterm birth by 1.74-fold (95% CI: 1.00, 3.03), women with high education level showed the increased risk by 1.82-fold (95% CI: 1.02, 3.23), and women with high income showed the increased risk by 3.41-fold (95% CI: 1.40, 8.27). Our findings identified a significant increased risk of preterm birth in passive smokers, and the risk can be reduced by stopping passive smoking. Prevention of smoking, especially when women are present, should be urgently implemented to protect the health of offsprings.

Biography

Xi Chen is a PhD from Huazhong University of Science and Technology and majors in nutrition and food hygiene, Hubei key laboratory of food nutrition and safety, China. She has clinical experience in providing suggestions of health lifestyles for pregnant women and scientific feeding guidance to the infants aged 0 ~ 2.

chenxi_tj@hust.edu.cn

Notes: