Abstract

Background: Smoking during pregnancy is the most important preventable perinatal health problem. The aim of this research is to determine smoking prevalence in pregnant women at different times of pregnancy in Andalucía, using biochemical validation methods and to explore factors associated with it. Methods: Cross-sectional study. The study population was pregnant women followed in andalusian public health centers. A random sample of 40 health centers, stratified by number of pregnancies was collected, with 1813 pregnant enrolled in 3 independent samples (beginning and end of pregnancy, postpartum). The smoke exposure was measured by urinary cotinine, self-report and carbon monoxide in exhaled air. Control variables were socio-demographic, obstetric and related to smoking habit. A logistic regression was performed to explore factors associated with pregnancy smoking. Results: The mean prevalence in the whole sample was 21.6%, which was lower at the end of pregnancy (15.6%) and postpartum (16.7%) than at the beginning (30.3%). Daily smokers fell from 56.3% before pregnancy to 14% at the end (according to self-report). Most of the quitters gave up before pregnancy (21.8%) or when they noticed they were pregnant (23.6%). Deception rate was 19.6%, varying according to gestational age and the amount of tobacco consumed. Younger age (OR: 0.956, CI 0.92-0.99), be exposed to second hand smoke at home (OR: 3.48, CI 2.6 to 4.7), a higher level of consumption before pregnancy (6-10 OR 13.1 CI 3 to 56.9,> 10 OR 25.1 CI 5.8 to 109.6), greater gestational age at measurement (end OR: 0.5 CI: 0.4-0.8; immediate postpartum OR 0.4 CI 0.3-0.6) and lower educational level (no education and first grade compared to university OR: 1.98, CI 1.22 to 3.22) were identified as factors associated. Conclusion: Consumption variations with gestational age compel to indicate the time of measurement in prevalence studies. The profile of the pregnant smoker was being young, poorly educated, exposed to tobacco smoke at home and with a previous history of heavy smoking.

Keywords
