

**Tobacco smoking in pregnant women: fifty years of evolution in France**

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**Background:**

Smoking during pregnancy is a major modifiable risk factor for maternal and foetal morbidity. We aimed to describe 1/ smoking trends in France between 1972 and 2016, 2/ the factors associated with smoking cessation and reduction during pregnancy in 2016.

**Methods:**

French National Perinatal Surveys are routine surveys based on a representative sample of births (N = 11,733 in 2016). Data were collected in face-to-face interviews in postnatal wards and from the mother's medical record. Smoking rates before pregnancy and during 3rd trimester were estimated for each study year and characteristics associated with smoking reduction (relative percent change in number of cigarettes smoked before and during pregnancy <50% or ≥ 50%) compared with smoking cessation were analysed using multinomial logistic regression.

**Results:**

After significantly decreasing from 1995 onwards, smoking prevalence stagnates since 2010 both before pregnancy and in the 3rd trimester (30.1% and 16.2%, respectively in 2016). In 2016, 45.8% ceased smoking during pregnancy, 37.2% reduced by ≥ 50% their consumption and 16.9% reduced by < 50% or did not reduce at all. The more cigarettes women smoked before pregnancy, the greater this reduction was ( $p < 0,001$ ). Moderate reduction (<50%) vs stopping was more frequent in multiparae compared to nulliparae (aOR = 2,47 [IC95%:1,93-3,15]) and in women with low education (aOR(<High school vs university graduates) = 7,20 [4,78-10,82]) and low income (aOR(<1500€/per month/>3000€) = 2,30 [1,51-3,50]).

**Conclusions:**

Smoking rates were high before and during pregnancy in France in 2016. Socio-demographic factors should be considered when targeting women most at risk of continuing smoking during pregnancy.

**Key messages:**

- After significantly decreasing from 1995 onwards, smoking prevalence stagnates since 2010 both before pregnancy and in the 3rd trimester in France.
- Supporting female smokers of childbearing age in their attempts to quit and remain non-smokers even after pregnancy is crucial, especially in multiparae and women in poor social condition.