

**The association of depressive symptoms and smoking during and after pregnancy:
a longitudinal study**

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Abstract

This study is part of a doctoral research which deals with the problems of smoking during pregnancy.

Background –Symptoms of depression may be an independent contributor to continued smoking during pregnancy. Depressed persons may smoke in order to immediately ameliorate their sense of well-being or as a quick reward, which makes it harder for them to quit smoking compared to non-depressed persons.

Aim – We want to explore the association of depressive symptoms with smoking in a longitudinal study and to identify characteristics that predict the risk of continued smoking during pregnancy and in postpartum.

Design – An observational, prospective, non-interventional study was performed.

Methods - Data of 605 women were collected between September 2008 and December 2010 at two moments during pregnancy (before 16 weeks and between 32 and 34 weeks pregnancy) and at one moment postpartum (after 6 weeks PP) on the participants' smoking behavior and of their partners. Feelings of depression using the Beck Depression Inventory (BDI), level of education and socio-demographic variables were registered.

Findings - Smokers overall report significantly more symptoms of depression compared to non-smokers and recent ex-smokers. Lower educated pregnant smokers report more feelings of dysphoria than smokers with a higher education. BDI-score ≥ 15 , respondent's age < 29 year, having a smoking partner, a lower education and no paid job indicate a tendency toward continued smoking during pregnancy and postpartum.

Conclusion - Professionals should perform an extensive anamnesis. This should include besides all obstetrical parameters, questions about the smoking behavior of the woman and her partner, educational level and job status. When there is a presumption of feelings of depression, they could consider measuring the level of depression using f.i. the Beck Depression Inventory. In case of a BDI-score ≥ 15 , one could refer the woman to specialized health care for treatment of depression.