

# Summary

## Background/Subject/Research Question

Smoking and alcohol use during pregnancy are important risk factors for the development of the foetus and are associated with various pregnancy complications and negative outcomes for children. Recent data on consumption prevalence among expectant and breastfeeding women in Austria are lacking, as are insights into factors influencing consumption, the attitudes of pregnant women regarding consumption during pregnancy or how these issues are addressed in antenatal care.

## Methods

A mixed methods design was chosen to enable a comprehensive picture incorporating different perspectives. Data on smoking and alcohol consumption during pregnancy and the breastfeeding period as well as experiences in antenatal care were collected, firstly, through an online survey among new mothers who had given birth in a *Gesundheitsverbund* hospital in Vienna (N = 888), and secondly, through qualitative interviews with expectant mothers in the last trimester (N = 32). The perspectives and experiences of midwives and gynaecologists, as well as the challenges they face, were assessed using qualitative interviews (N = 11) and an online survey (N = 209).

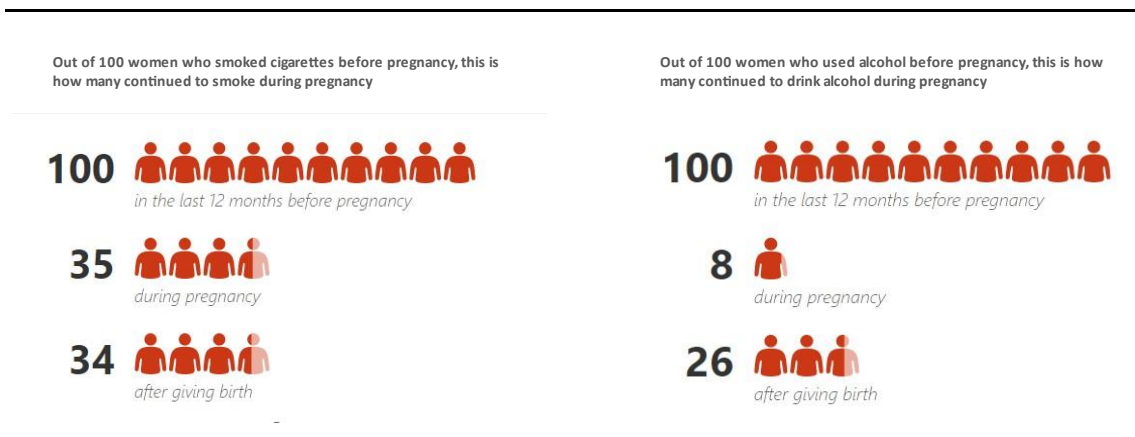
## Results

### *Alcohol use and smoking during pregnancy and socio-economic influences*

Of all women surveyed 85 percent did not consume cigarettes or alcohol during pregnancy. About one third of the women reported smoking before their pregnancy, whereas 12 percent of surveyed women smoked at least occasionally during pregnancy. Slightly less than two thirds of surveyed women drank alcohol at least occasionally before pregnancy. During pregnancy, a total of about 6 percent of surveyed women consumed alcohol.

Comparing alcohol and tobacco, pregnant women were more likely to quit alcohol than tobacco. Three out of 10 women who smoked before pregnancy also smoked during pregnancy. Of the women drinking alcohol before pregnancy, one in twelve women drank alcohol at least occasionally during pregnancy (see Figure 0.2).

Figure 0.2:  
Changes in smoking and alcohol consumption during pregnancy



Source: GÖ FP

Women who smoked during pregnancy were significantly more often younger than 25 years, had significantly more often a low formal education and a migration background. For alcohol, there was no significant influence of age, education, or migration background on the women's consumption during pregnancy.

Interviews showed that women's abstinence from alcohol during pregnancy was primarily motivated by care for the baby's health, but also by the fear of pregnancy complications (e. g. miscarriage) or the avoidance of self-blame in case of health problems (regardless of whether these were alcohol-associated). For many women, the availability of non-alcoholic versions of alcoholic beverages (wines, beers) or non-alcoholic beverages, especially their appealing design and pricing, played an important role in the decision to have an alcohol-free pregnancy. The social environment was perceived as supportive in abstaining from alcohol. In addition, the lack of social support was assumed to be an obstacle for consuming pregnant women to seek formal help. In the case of smoking, the baby's health was also stated as the main motive.

#### *Attitudes towards smoking and alcohol use during pregnancy*

The great majority of women (over 90 %) did not consider smoking and alcohol consumption during pregnancy to be positive. However, a more differentiated picture emerged for occasional consumption. Occasional smoking during pregnancy was rated problematic/very problematic by the vast majority of health professionals (97 % of midwives and 89 % of gynaecologists). Women also rated occasional smoking as largely problematic, but there is a clear correlation with their own smoking behaviour: while 96 % of non-smokers rated occasional cigarettes as problematic, this was the case for only 57 % of women who had smoked daily/almost daily during pregnancy.

Similarly, the majority of gynaecologists (89 %) and midwives (97 %) rated occasional alcohol use as "problematic" or "quite problematic". As for smoking, the assessment of harm regarding an occasional glass of alcohol correlated with the women's own alcohol consumption during pregnancy: 86 % of the women who reported abstaining from alcohol during pregnancy judged an

occasional glass as harmful, while less than half (46 %) of the women reporting at least occasional use considered it harmful.

However, women were often uncertain about the harm of small amounts of cigarettes or alcohol. This was evident not only in the qualitative interviews with pregnant women, but also in the online survey, where about one in twelve women (8.5 %) state that they cannot assess the harm of an occasional consumption of cigarettes and one in thirteen (7.6 %) could not judge the harm of an occasional glass of alcohol during pregnancy.

These ratings correspond with the experiences of the pregnant women in the qualitative interviews, who reported being confronted with different opinions on the drinking of small amounts in their immediate social environment, whereas a generational issue was reported here. Some women described the downside of the awareness concerning the consequences of small amounts of alcohol as being the very judgemental and shaming attitude in social media towards women who smoke or drink alcohol during pregnancy.

#### *Alcohol and smoking in antenatal care – screening and intervention*

The assessment of alcohol and smoking history is obligatory in the Austrian mother-child health passport, the *Mutter-Kind-Pass*. Three out of ten women were not asked by their gynaecologist about their alcohol consumption during pregnancy, and one out of ten women was not asked about her smoking (as measured through self-report). In the online survey of gynaecologists, 94 percent state that they assess smoking history and 80 percent that they assess alcohol consumption in every pregnant woman without exception. The recording of passive smoking or use of alternative nicotine products plays a much smaller role in prenatal care: just under 20 percent of the gynaecologists and 15 percent of the midwives state that they record passive smoking in every pregnant woman, use of alternative nicotine products is recorded by four out of ten gynaecologists and one out of ten midwives.

Women mostly perceived the assessment of their consumption behaviour in the context of antenatal care to be an integral part of health care for pregnant women. Women and the health personnel alike suggested that the way the respective questions were embedded in the *Mutter-Kind-Pass*, their wording (yes/no) as well as the predominantly non-judgemental attitude of the gynaecologists contribute to this perception. Some women expressed criticism regarding potential judgemental wording, which not only dictate a socially desirable answer, but also made it more difficult to have an open discussion about consumption.

The vast majority of health professionals consider smoking and alcohol to be important in prenatal care compared with other health topics, such as diabetes or obesity, whereby both gynaecologists and midwives tend to rate smoking as the topic of greater relevance (compared with alcohol).

With regard to the state of knowledge about possible health consequences of alcohol and smoking during pregnancy, there were weaker and stronger areas. Pregnant women themselves as well as the health care staff estimate the level of knowledge of women regarding the possible consequences of alcohol in pregnancy to be very good. Uncertainties and resulting fears were primarily

found with regard to the harmfulness of small amounts of alcohol, not only in form of alcoholic beverages, but also in form of alcohol-containing food.

Both the online survey and the interviews with women show that the majority were not informed about the health consequences by their gynaecologists in prenatal care. These results are in line with the survey of health professionals, where one third of the gynaecologists state that they only inform pregnant women with a (suspected) consumption and five percent do not inform them at all. Regarding smoking, a lower level of knowledge is assumed by both the women and the health staff; here, slightly more than half of the physicians only inform women who are believed to smoke. Many pregnant interviewees did not experience the lack of information by health staff as a short-coming, partly because consumption during pregnancy was out of the question and partly because they preferred to conduct their own research on certain (detailed) questions.

With regard to recommendations given to pregnant women, the vast majority of both gynaecologists and midwives advise abstaining from any alcohol consumption during pregnancy. Two thirds of the doctors and about half of the midwives recommend giving up cigarettes completely, whereby both professions stated that they tailor their advice to the individual case: in cases where a complete cessation of smoking is not feasible, women are encouraged to reduce smoking. According to the interviews, only some pregnant women had received recommendations regarding smoking from their physician.

#### *Barriers for health professionals*

Two thirds of the gynaecologists and about 40 % of the midwives reported that they face no barriers addressing alcohol and smoking consumption within prenatal care. Among those who do report barriers, the most common barriers for both professions are a lack of knowledge regarding support services and a somewhat resigned attitude assuming that they will not be able to change the women's consumption. Midwives were more often hindered by a lack of confidence in conducting the conversation, language barriers, the desire not to put additional burden on women, or certain circumstances within the settings, such as a lack of privacy or time resources for follow-up conversations.

#### **Conclusion**

Estimates from this study indicate that about 3,100 pregnant women in Vienna smoke (at least occasionally) and 1,100 consume alcohol (at least occasionally) every year. This illustrates that smoking and alcohol in pregnancy are relevant health issues. Especially in the case of smoking, the results suggest that most smoking pregnant women have an addiction and do not succeed in cessation. Within the scope of the study, young women, women with a lower level of formal education and women with a migration background could be identified as the target group for support services. It seems that they cannot be reached sufficiently by the existing services and therefore new targeted services should be considered.

The integration of the screening of alcohol and smoking consumption in the *Mutter-Kind-Pass* has created a good foundation to establish the topic as a routine subject. There is potential for improvement in the communication of consumption recommendations: our findings suggest focusing on a small selection of central short recommendations that are backed up with a clear rationale (i. e. explaining, for example, why abstaining from alcohol is recommended).

### **Keywords**

alcohol, smoking, pregnancy, breastfeeding, midwives, gynaecologists, antenatal care

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