

Alcohol, tobacco and illicit drug use before and during pregnancy in Belgium between 2022-2024

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Background and Objectives



Substance use during pregnancy is associated with **adverse outcomes** for both mother and child.

However, **recent prevalence estimates** of perinatal substance use **are lacking** in Belgium.



This study aimed to determine the **prevalence** and **determinants** of alcohol, tobacco and illicit drug use **before** and **during pregnancy** in Belgium.

Methods



Observational, self-reported data from the **BELpREG pregnancy registry** in Belgium were used.

Patients completed digital questionnaires every 4 weeks in pregnancy and up to 8 weeks postpartum, reporting on **alcohol, tobacco** and **illicit drug use** before and during pregnancy.



Included participants were ≥18 years and had completed at least one BELpREG questionnaire on substance use during pregnancy between 2022 and 2024.



Data were extracted on August 13, 2024, and analyzed using descriptive statistics and multivariable logistic regressions.

Conclusions

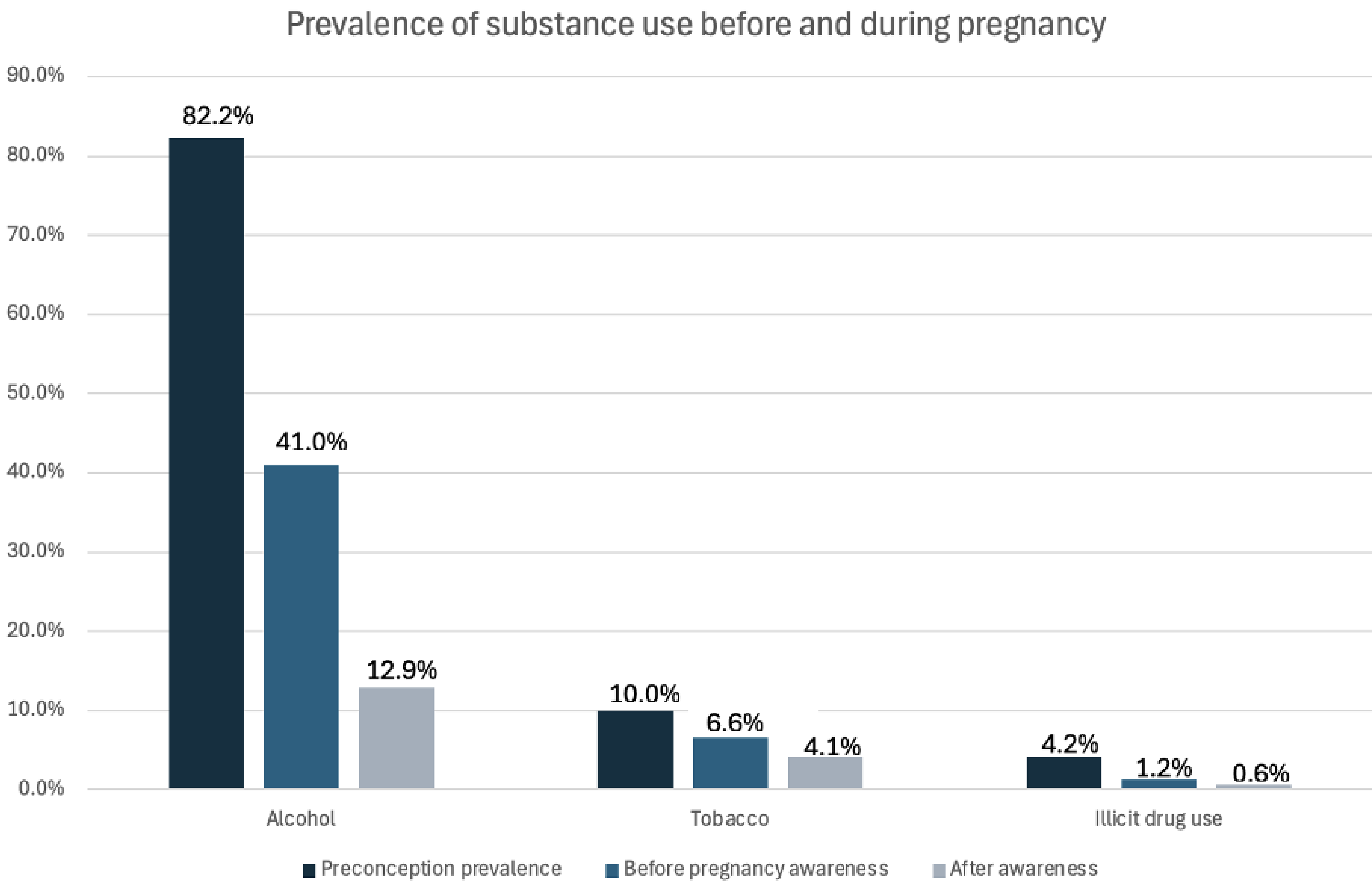


This study showed a **significant reduction in substance use** during pregnancy compared to preconception.

However, a **notable proportion continued use**, particularly in the first weeks before pregnancy awareness.

These findings highlight the **need for targeted public health interventions** to raise awareness and encourage the cessation of substance use prior to conception and during (early) pregnancy.

Results



Data were collected from 1339 participants (for the preconception period) and 1224 participants (for the first trimester)

Determinants for alcohol use in the 1st trimester

Using tobacco in the 1 st trimester	aOR 5.37	95% CI [2.70-10.66]
Spontaneous pregnancy	aOR 2.94	95% CI [1.51-5.75]
Unplanned pregnancy	aOR 2.88	95% CI [1.77-4.67]
Higher education	aOR 2.12	95% CI [1.14-3.96]
Cohabitants drinking alcohol daily	aOR 2.01	95% CI [1.09-3.70]

Determinants to report tobacco use in the 1st trimester

Cohabitants using tobacco	aOR 9.11	95% CI [4.48-18.52]
Lower education	aOR 7.67	95% CI [3.67-15.67]
Using alcohol in the 1 st trimester	aOR 6.67	95% CI [3.07-14.64]
Unplanned pregnancy	aOR 3.31	95% CI [1.53-7.15]
Using illicit drugs in the 1 st trimester	aOR 39.03	95% CI [3.72-409.83]

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