

# The prevalence and type of safety questions on paternal medication use: a cross-sectional analysis in Belgium

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## Background

Little is known about the risks of paternal medication use regarding reproductive health, although safety questions among male users may exist. The **extent and type of safety questions by men** have not been studied in Belgium yet.

## Objectives

This exploratory study aimed to gain insight into the information needs of men about the **risks of paternal medication use on their fertility**; the **course of pregnancy**; and the **health of offspring**.

## Methods

- A **cross-sectional, anonymous web survey** was distributed in Belgium through social media and via healthcare professionals between September 2022 and March 2023.
- All Dutch-speaking men between 18-50 years and (occasionally) using medication could participate.
- The survey consisted of questions on 1) **personal characteristics**, including chronic conditions and medication use, 2) **information needs** on the risks of paternal medication use, and 3) **perceptions** towards the availability of safety information about paternal medication use.
- Ethical approval (MP021730) and online consent of participants were obtained.

## Results

### 1) Study participants' characteristics

In total, **249 men** participated of which 73% completed the survey.

- 78% was 18-35 years; 31% already had children, 13% was pregnant or trying to get pregnant as a couple, 7% had followed fertility treatment and 23% was (being) educated in healthcare.
- 40% reported chronic conditions (mostly hay fever, asthma, or atopic dermatitis); 22% used medication daily.

### 2) Information needs on the risks of paternal medication use

**20%** had already questioned the risks of paternal medication use on their **fertility**.

**12%** had already wondered if paternal medication use could have adverse effects on the **course of pregnancy**.

**13%** had already reflected upon potential adverse effects of paternal medication use on the **health of offspring**.

- One-third answered that their safety questions related to the occurrence of 'specific' risks for pregnancy or offspring.
- Although safety questions often did not relate to a specific medicine, the most questioned medicines were **analgesics, psychotropics (mainly antidepressants)** and **immunosuppressants**.
- 15% had already questioned if medication could be present in semen, and 5% whether to use a condom to avoid the transfer of medication to semen.

### 3) Perceptions towards the availability of safety information

All respondents (97%) agreed that reliable information on the safe use of paternal medication should be available, preferably to be **received from general practitioners (71%), pharmacists (61%) and the leaflet (56%)**.

## Discussion and conclusions

- In this cohort, **up to 20% of men** already had **questions on the potential risks of paternal medication use** on their fertility, the course of pregnancy and/or the health of offspring.
- While **most questions were on a general level**, the safety of analgesics, antidepressants and immunosuppressants were regularly questioned.
- Clinicians & TIS centra could use these insights **to tailor evidence-based information to males' information needs**.