



## Youth perceptions of nonmedical use of psychoactive medications

The YOUTH-PUMED research project studied the nonmedical use of prescription drugs (NMUPD) among young adults in Belgium. Empirical data were gathered in 2020 among young adults (aged 18-29 years old) in Belgium by conducting in-depth interviews (N=63) and an online survey (N=574). In addition, we conducted an explorative analyses of online forums in which people discuss the nonmedical use of medicines. Our study shows that the phenomenon of NMUPD is heterogeneous: we found that the young adults were using one or more psychoactive medication (sedatives, analgesics or stimulants) in different contexts, and their motives for use varied.

## Context and question(s) of research

Concern about the nonmedical use of prescription drugs (NMUPD) is increasing worldwide. However, the issue has so far received limited attention in scientific research in Belgium, as well as in Europe. The aim of this research is to better understand this phenomenon among young adults (aged 18–29) in Belgium and their perceptions about their own use and associated harms. We explored in particular the nonmedical use of sedatives, analgesics and stimulants, the prescription drugs most predominantly associated with nonmedical use. We used the following definition of ‘nonmedical use of prescription drugs’: (i) use without a prescription, (ii) or use in ways not intended by the prescriber, such as using prescribed medications in higher quantities, in a manner other than as prescribed, or for purposes other than as prescribed.

Our study was driven by the following research questions:

- RQ1: What do young people think about their nonmedical use practices, including types of medications used, settings of use and supply, perceptions of risk and social acceptability?
- RQ2: What information do young people consult and rely on regarding prescription drugs?
- RQ3: How has the nonmedical use and supply of prescription drugs been discussed among online communities of (potential) users?

- RQ4: What measures may help to prevent or reduce nonmedical use of prescription drugs and related harms among young people?

## Main findings

In nonmedical contexts, young adults used prescription drugs mainly for self-treatment and performance enhancement and to a lesser extent for recreational purposes. Prescription analgesics and sedatives were mainly used for self-treatment, whereas stimulants were mostly used for study purposes and (to a lesser extent) for recreation. The young adults were primarily using these pharmaceutical products as solutions for problems that they encountered in daily life.

A particularly interesting area in this study was young people's initiation with NMUPD. The age of initiation for nonmedical use of prescription drugs is during adolescence; in the case of this sample it was 16 to 18 years old. Initiation of NMUPD occurred both with and without a prescription: in the former case, nonmedical use was often initiated using leftovers from the young person's own prescriptions; and in the latter, prescription analgesics and sedatives were often obtained from a family member, while prescription stimulants were more often given by friends.

In this study we also elaborated on the patterns of NMUPD. Our findings show that most young adults who used prescription drugs nonmedically did so occasionally or sporadically, and their overall experience with NMUPD was quite limited. The vast majority of the young adults administered prescription drugs via the conventional oral route. When the drugs were administered through non-oral routes, this was typically associated with recreational use. We found that these young people sometimes used larger amounts of their prescription drugs to intensify the effects associated with the medicines. They seemed to be less mindful of dosages and more likely to increase the dose when prescription drugs were used for recreation than when they were used for self-medication or performance enhancement. Our results show that prescription drugs might be used concurrently with other psychoactive substances. Combining psychoactive substances purposely to alter the substances' effects, i.e. in order to increase or decrease their psychoactive effects, typically occurred in recreational contexts. When prescription drugs were mixed with other substances in order to enhance performance or self-medicate, this was done mainly in an attempt to counteract their psychoactive effects. However, it is worth noting that, in some instances, using psychoactive substances concurrently also happened more coincidentally rather than intentionally. In these instances, multiple substances were taken in the same timeframe, or the substances were taken for the same purpose.

We found that the young adults obtained prescription drugs for nonmedical use mainly through social supply, including family members (including the medicine cabinet at home) and from friends for free. Another important source of supply was their own prescriptions for medical problems. The purchase of prescription drugs via other illicit channels or obtaining medicines fraudulently via physicians or pharmacies was less common. Our study found that it is quite common for young people to divert their medicines to friends and family members. More specifically, transactions mostly involved the sharing or trading of small amounts of medication with friends or acquaintances without the expectation of a monetary payment or other exchange.

Our study also explored young adults' perceptions of NMUPD. More often the young adults in our study perceived prescription drugs as inherently safer and less addictive than illicit drugs. Nonetheless, the young adults interviewed for

this study were also aware of the health risks associated with the NMUPD and some also acknowledged that their sense of safety might be false. Many respondents described their own use as responsible and reported making reasoned and informed choices about NMUPD. For instance, they carefully considered their supply sources and the context in which their use took place, in order to reduce possible health risks. We found that young adults also informed themselves as a risk management strategy. They searched for both objective medical knowledge and more subjective reports about prescription drugs' adverse effects, health risks including addiction, and dosage. They usually used the internet to search for information, in particular search engines, and specialised websites, and online forums to a lesser extent. The study findings also indicate that young adults are likely to learn from trusted family members and friends. Official medical sources, such as medical professionals or the (online) package insert, were sometimes considered less suitable as sources of information, when the information provided was difficult to understand, too general and did not include harm reduction approaches. Instead, young adults consulted online forums, which offer personal experiences and testimonies. Online forums give peers the opportunity to discuss NMUPD. In addition to being sources of information, forums allow individuals to share personalised accounts and experiences.

In the forums documented for this study, discussions about NMUPD mostly occurred in the more general drug-related forums that were structured to allow discussions, and in which sharing information about the use, effects or harms of (il)licit drug use was a prominent feature. Information exchanges mostly contained anecdotal evidence, and threads rarely included findings from the scientific literature or advice from health professionals. If we focus on the threads associated with nonmedical use, the subject matter seemed to differ depending on the type of medication being discussed, and in the case of prescription stimulants and sedatives was very often similar to the main motives of use identified in this study. For instance, the threads associated with the nonmedical use of stimulant medication showed a clear emphasis on questions and discussions about the effects, including side effects and desired effects, related to study performance enhancement. A similar number of threads went beyond performance enhancement motives and focused on the use of stimulant medicines in recreational contexts and supply strategies for this medication. Threads about sedatives mainly discussed self-medication, particularly the use of prescription sedatives in order to cope with mental or physical health problems. Accordingly, the content of these threads was often more related to topics such as the risk of addiction, tips about quitting the use of sedatives or even how to recognise and handle withdrawal symptoms. The way the nonmedical use of prescription painkillers or analgesics was discussed in these forums was quite atypical and not linked to the main motives for use uncovered in this study (primarily pain relief, followed by sleep and relaxation). For instance, surprisingly, we observed a focus on recreational motives for use. These threads focused on how forum members could create the 'best high' or 'most euphoria' when using painkillers.

## Conclusion and recommendations

The present research is the first study that provides in-depth insights regarding the nonmedical use of analgesics, sedatives and stimulants among young adults in Belgium. Corroborating previous study findings, our study confirms that the phenomenon of NMUPD is heterogeneous: we found that the young adults were using one or more psychoactive medication (sedatives, analgesics or stimulants) in different contexts, and their motives for use varied. However, it is important to note that the study has several

limitations. The main limitation is the relatively small size of our sample which is mainly composed of students. Further research is therefore needed in order to collect more data on this heterogenous young population.

Initiation to NMUPD often occurs at a young age. Therefore, school-based strategies could be designed to reach youth at different stages of their education, including middle school, high school and college. It is also clear that universities and university colleges play an important role in informing their students about the risks of using prescription drugs nonmedically. Knowing that students are especially vulnerable to the academic and social pressures that can spur health risk behaviours, campus health professionals should be educated about such behaviour and involved in dispelling myths about the nonmedical use of stimulants to improve academic performance. The research found that prescription medication, especially sedatives and analgesics, were often initially, but also subsequently, obtained through adult family members, parents in particular. It is therefore important to increase parents' awareness of NMUPD and its risks, and about non-pharmacological alternatives. Some young adults in this study took prescription drugs that had not been prescribed for them from the medicine cabinet at home, without the knowledge of their parents. Useful strategies in this regard include improving educational efforts about safe storage and disposal, which could be promoted by setting up drug disposal programmes and awareness campaigns.

Physicians were also an important supply source of prescription drugs used nonmedically, when these were obtained for medical purposes but used outside of the medical guidelines. Therefore, regulations for prescribing and dispensing psychoactive medicines should be strict, while not undermining patients' access to essential treatments. Physicians and pharmacists should be educated about the health and legal consequences of NMUPD and the diversion of medicines, and should inform their patients about these risks. It is also important that they stress the need for non-pharmacological alternatives to medicines. The majority of the respondents in our study mentioned that they obtained information about prescription drugs mostly from online sources and less often from medical professionals. However, physicians have an important educational role. We recommend creating opportunities for young people to talk about NMUPD with their physicians. Young adults participating in our study mostly looked for information about prescription drugs online. They indicated that peer-based online forums and social media contained information they found useful. There is a need to increase the presence of healthcare professionals in online platforms and to design and implement online harm reduction initiatives.

We observed that our participants considered the use of prescription drugs to be less risky than the use of illicit drugs, and this tended to be associated with the way they were produced, their medically sanctioned use, their legal status and their widespread use by many people for health purposes. Therefore, it is important that the general public is correctly informed about the benefits, side effects and health risks of the (non)medical use of prescription drugs. It is of equal importance to increase awareness of non-pharmacological alternatives among the general population. Our study findings show that profiles, motives and use patterns were different for each type of medicine. Therefore, it is important for intervention and prevention programmes to be diversified and tailored to the specific target groups.

Finally, our study findings show that young people who used prescription drugs recreationally were more likely to have experience with illicit drug use. We therefore recommend similar prevention and harm reduction efforts for the recreational use of prescription medicines as those already existing for illicit drugs. Our findings also illustrate that prescription drugs were used concurrently with other psychoactive substances, and therefore interventions should focus particularly on the risks of simultaneous polysubstance use.

## Read more

Bawin, F., Emplit, K., Tieberghien, J., Vandenbogaerde E., Pardal, M., Guillain, C., Decorte, T. *Youth perceptions of nonmedical use of psychoactive medications*. Final Report. Brussels : Belgian Science Policy Office 2021 – 169 p. (Federal Research Programme on Drugs)

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