1. Introduction

Around 96 million adults in the European Union are estimated to have used illicit drugs at least once in their lifetime. The global COVID-19 pandemic has dramatically altered different aspects of modern life, including drug use, the drug market, and the ability of European countries to provide help and support to people with drug problems (EMCDDA, 2020a). As there are great differences across European countries in their drug policy, drug availability, demand and response services, and also in the management of the COVID-19 pandemic, the aim of this study was to investigate how the COVID-19 pandemic might...
have affected patterns of drug use, drug market, coverage, and implementation forms of prevention measures, treatment and harm reduction services in Lithuania. In this article, we discuss a hypothesis that the COVID-19 pandemic may have impacted different aspects of the drug phenomenon in Lithuania: not only drug supply and demand, but also the response measures, and that these changes were greatest at the beginning of the pandemic, when COVID-19 management restrictions were introduced and during lockdown periods or COVID-19 waves. We have reviewed the results of surveys conducted by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) and Drug, Tobacco and Alcohol Control Department, as well as data collected from other institutions of the Republic of Lithuania and other national data sources.

2. Prevalence of psychoactive substance use


In order to investigate and rapidly document the current impact of the COVID-19 epidemic and national responses in the EU Member States on changes in patterns of drug use, harms and service provision, the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) conducted a study using an adapted version of the trendspotter methodology across the EU Member States, whose part is the survey on Impact of COVID-19 on patterns of drug use, harms and drug services in the European Union. The Mini European Web Survey on Drugs: COVID-19 is part of this snapshot and it was conducted across Europe. The aim is to gather information about how patterns of drug use may have changed in Europe due to COVID-19 (EMCDDA, 2020b).

The standardised online questionnaire European Web Survey on Drugs: COVID-19, as developed by the EMCDDA, was made available online in 21 languages between the 17th of April and the 3rd of June 2020. The study specifically targeted adults aged 18 years old or above with experience of illicit drug use over the past 12 months.

In Lithuania, the survey questionnaire was distributed through social networks and operated for 5 weeks. During this period, 568 respondents from Lithuania participated in the survey. The mean age of the subjects was 24.7 years old, ranging from 18 to 46 years old. The majority of the survey participants were men (55.1%).

It is observed that the consumption rates of some substances in Lithuania were higher compared to the overall rate of all countries participating in the study. Seven out of ten respondents had used cannabis in the previous year, almost half had used MDMA, and one third had used cocaine, amphetamine or LSD. More than half of those surveyed reported having used cannabis in the past 30 days; one in six had used amphetamine, one in seven –MDMA, one in eight – cocaine and LSD (Fig. 1).

Meanwhile, the results of European countries show that more than half of the respondents (60%) had used cannabis in the previous 30 days, one in ten – ecstasy, cocaine, LSD and opioids; 5% had used amphetamine, 4% – heroin and synthetic cannabinoids.

The study assessed various changes in the use of psychoactive substances during the COVID-19 pandemic. One-fifth of the respondents reported using more drugs (22.4%) during COVID-19, and one in six (17.8%) using less during that period. 15.5% of the respondents indicated that they used the same amount. Meanwhile, the results of European countries show that almost half of the respondents did not use or used less drugs, 30% of respondents reported using more drugs and 23% – using less.

The biggest changes were among cannabis users. The majority of the respondents who used cannabis started using more (16.2%) and in higher quantities (8.6%) during the COVID-19 pandemic. 7.7% of the respondents started using more alcohol instead of cannabis, and 5.3% completely stopped using cannabis (Fig. 2). Assessing European participation in the study highlights that regular (weekly) cannabis users were twice as likely to report an increased frequency of use compared with non-regular users during the confinement period.

The use of MDMA was not significantly altered during COVID-19. About a quarter of the respondents said there was no change; 8.5% of the respondents indicated that they had stopped using these substances, and 4.8% used less often. About 16.5% of the respondents reported that their cocaine use patterns did not change, 6% – stopped using it, and about 3% – used less. About 16% of the respondents reported no change in their amphetamine use habits; 5.1% started using more, and the same number stopped using amphetamine altogether. One-fifth of the subjects reported that their LSD use did not change during the COVID-19 pandemic; 4.9% had stopped using the substance, and 2.3% started using more.

The study also looked at the reasons for lower or higher drug use. The majority of the respondents, both in Europe and in Lithuania, reported using less drugs due to reduced access and availability. In Lithuania, a smaller proportion of respondents reported...
Fig. 1. Last year and last month prevalence of drug use (%) in Lithuania, 2020.
Source: Narkotikų..., 2020b.

Fig. 2. Change in cannabis use since the outbreak of COVID-19 (%), 2020.
Source: Narkotikų..., 2020b.
using less drugs due to financial instability or a decrease in income. Only about 3.9% of the respondents indicated that they were concerned about the drug use impact on their health (Fig. 3).

One in seven subjects reported using drugs during COVID-19, mainly due to boredom, about 6.9% – because of pandemic concerns (Fig. 4).

A quarter of the respondents said they did not attempt to purchase illicit drugs during COVID-19, with one in ten receiving illicit drugs from another dealer. 8% reported buying in larger quantities than usual. For one-third of the respondents, drug acquisition remained unchanged. 40% of the European respondents said that restrictive measures did not change their drug-buying habits, with 24% saying that they did not try to buy drugs, and 5% stopped buying illegal drugs (Fig. 5).

The study sample is predominantly characterised as young recreational drug users: young adults with a greater experience of drug use than reported by the general population. General Population Surveys can provide valuable information on drug use prevalence in Europe, but insufficient sample sizes can prevent them from yielding robust information on patterns of use. This is where web-based surveys can help. They are a useful tool for collecting information on patterns of drug use from a larger sample of people who use illicit drugs and can complement and overcome some of their limitations of other data sources. While not being representative of the general population, carefully conducted web surveys may nevertheless provide valuable additional information about variations in use among different groups of people who use drugs.

2.2. Changes in psychoactive substance use during the COVID-19 pandemic among university and college students

Substance abuse is common among university/college students and can result in a range of academic, physical, mental, and social problems. Lack of skills, necessary to cope with pressure and manage stress in their lives, which became particularly relevant during the pandemic, can lead to substance abuse. In autumn 2020, the Drug, Tobacco and Alcohol Control Department conducted an online survey among university/college students to assess their substance use patterns, well-being, attitudes towards prevention measures and policy, and explore the relationship between psychological well-being and substance abuse. The sample size was 2,412 students, studying in Lithuania’s higher education institutions (universities and colleges) (Narkotikų..., 2020a).

Survey results showed that 37.2% of the students smoked or used other nicotine containing products daily (tobacco cigarettes – 15%, heated tobacco products – 15.9%, e-cigarettes with nicotine-containing liquid – 12%). 71.4% of the students consumed alcohol at least once in the last month, and 2.6% – daily. 11.8% of the students used drugs

---

Fig. 3. Most frequent reasons for decreased drug use as a result of the COVID-19 restrictions (%), 2020.
Source: Narkotikų…, 2020b.
Fig. 4. Most frequent reasons for increased drug use as a result of the COVID-19 restrictions (%), 2020. Source: Narkotikų..., 2020b.

Fig. 5. Methods of acquiring illicit drugs during COVID-19 (%), 2020. Source: Narkotikų..., 2020b.
students who used alcohol, nicotine or drugs irregularly were more likely to reduce the use of these substances or abstained during quarantine. However, those who use these substances regularly were more likely to increase their use (use more often or in larger amounts) during quarantine. Among students who were drinking daily, 41.3% answered that during quarantine their alcohol consumption increased (they used more often or in larger amounts than before quarantine), 22.2% consumed alcohol less frequently or in smaller amounts, and 34.9% reported that there were no changes in their drinking habits (compared to the pre-quarantine period). 40.4% of daily users of drugs, new psychoactive substances or inhalants replied that during quarantine their drug use increased, and 19.2% answered that their drug use decreased. Among daily smokers (or other nicotine-containing products users, vapers), 26.4% of them were smoking/consuming nicotine more often or in larger amounts during quarantine, and 23.5% consumed less nicotine than before quarantine.

To reduce the stress of studying, to relax or fall asleep, as many as a third of the students used nicotine-containing products and alcohol in the last year, with a smaller proportion choosing prescription medications (13%) or drugs (8%). In order to improve study achievements, increase work productivity and performance, in the last year, almost half of the students consumed energy drinks and other caffeinated products. 23% of the students used nicotine-containing products for this purpose, 11% – alcohol, 8% – prescription medications, and 4% – drugs.

Study results also showed that during quarantine the well-being of as many as 23% of the students worsened. More than a quarter of the respondents were not satisfied with their health. More than a third of them often felt anxiety and had difficulty concentrating. Nearly a third of the respondents often had sleep problems or did not want to do anything. 28% of the students often felt depressed, and the same percentage had been thinking about suicide at some point in their lives. Students who used psychoactive substances rated some of their health and well-being indicators significantly worse than non-users, especially those who used psychoactive substances to reduce the stress of studying, relax, or fall asleep.

3. The impact of COVID-19 on harm reduction and substance use treatment

In order to investigate the effects and implications of this pandemic for people who use drugs in Europe, the EMCDDA instigated a mixed-method trend-potter study: Impact of COVID-19 on drug services and help-seeking in Europe. Results highlighted that COVID-19 and national lockdowns have led to reduced availability and provision of treatment and harm-reduction services in most European countries. Emerging evidence suggests that, like other healthcare providers, drug services are facing a range of challenges including: staffing shortages, access to personal protective equipment, and managing infected clients and staff vulnerability to infection (EMCDDA…, 2020b).

Lithuania also participated in this study, and the national results showed that provision of harm reduction services was not interrupted but the package of services was reduced: HIV testing was suspended. Instead of HIV testing, HIV self-tests were shared in small numbers. In order to reduce the frequency of visits, more syringes were issued per time. At the beginning of quarantine, there was a lack of protection measures, but the municipality supplied them.

According to harm reduction services providers, the frequency of consumption and the quantity of one dosage decreased among high risk drug users due to the fact that it has become much more difficult to earn or get money. Prices and quantity did not change. The availability did not decrease but, because of less income, drugs became less available to high risk drug users (low threshold cabinets clients). A significant proportion of individuals mix alcohol, methadone, and carfentanil.

The healthcare sector faced many challenges during the COVID-19 pandemic. Substance use treatment services were not an exception. The first lockdown in Lithuania was declared on 16 March, 2020. Since then some drug treatment services were entirely suspended (e.g. inpatient treatment for new clients was closed, outpatient consultations were replaced by telemedicine). Phased resumption of healthcare services started on 18 May, 2020. Despite the partial resumption of healthcare provision, difficulties such as COVID-19 outbreaks and the isolation of patients continued to be challenging. As there were no conditions in healthcare facilities to isolate patients who were infected with COVID-19 or had been in close contact with COVID-19, they were discharged for outpatient...
treatment. Complicated requirements for patients to access treatment, changes in types of interventions and disruptions in service activity and capacity during the pandemic may have severely affected the reported numbers of clients entering drug treatment.

The National Mental Health Centre’s data on monthly drug treatment demands showed a decrease in both new and overall clients entering treatment during the pandemic (Fig. 6). A particularly sharp decline in the number of patients entering treatment occurred during the first lockdown, which in Lithuania preceded the first wave of COVID-19 as some treatment services were entirely suspended.

In 2020, inpatient and outpatient treatment centres in Lithuania provided treatment in total for 555 persons, which is about 31% lower in comparison with 2019. The sharp decline in clients entering treatment is especially evident among opioid users (Fig. 7).

The disruptions in the number of clients entering treatment strongly correlates with the lockdowns, mandatory testing and COVID-19 waves, which not only impaired the treatment accessibility but data collection as well. Other issues, such as the changes in clients’ behaviours which would be unrelated to COVID-19 pandemic, are also possible but are less likely due to the lack of evidence.

4. Prevention in the context of COVID-19

4.1. School-based prevention, family-based prevention, and non-formal education

For children and adolescents, the two prime sites for substance use prevention are school and family (EMCDDA, 2019). Study of the Psychotraumatology Centre of Vilnius University showed that the number of adolescents (aged 13–18) facing psychosocial difficulties increased from 13% in 2019 to 18% in 2020. In 2020, more than half of adolescents had difficulty communicating with peers, and 1 in 4 said they had problems in their family (Psichotraumatologijos..., 2020). Although the quarantine and closing of schools had a significant impact on the psychological and social well-being of schoolchildren, the educational community made every effort to continue their activities. Based on the Education Management Information System data, in 2020 schools continued to give priority to social emotional education programmes and, less frequently, to psychoactive substance use prevention programmes, but there were changes in the popularity of these programmes compared to 2019. The coverage of some programmes decreased (mostly in the number of schools implementing the programme) and increased in other cases (mostly in the number of schoolchildren who participated in the programme) despite the quarantine (Table 1) (Narkotikų..., 2021a).
Engagement of children and planning their after-school leisure time is an integral part of non-formal and prevention education. In 2020, 60.2% of schoolchildren participated in non-formal education programmes or attended activities in schools (62.6% in 2019). Participation in non-formal educational activities was limited by distance learning introduced due to the COVID-19 pandemic. Seeking to adapt to the pandemic situation and restrictions, 62% of pre-quarantine activities were performed remotely. But the goal of the State Education Strategy for 2013–2022 that all schoolchildren would use the opportunities of non-formal education by 2020 was not achieved (Švietimo…, 2021).

According to data provided by the Centre for Health Education and Disease Prevention, in 2020,
the number of school-age children and children at social risk who participated in health education and training on smoking, alcohol and drug use prevention topics, organised by public health care and personal health care institutions, was almost 3 times lower than in 2019 (Fig. 8) (Narkotikų..., 2021a).

Family is generally the context in which children learn their group’s norms, values, attitudes and behaviours (EMCDDA, 2019). The psychological well-being of children significantly depends on the well-being of parents and carers and the situation in the family, which could be unstable and vulnerable during the pandemic. Unfortunately, in 2020, compared to 2019, the number of parents participating in all 4 parenting skills training programmes, recommended by the Ministry of Education, Science and Sports, significantly decreased (Fig. 9) (Narkotikų..., 2021a).

Based on data provided by the State Child Rights Protection and Adoption Service under the Ministry of Social Security and Labour, complex services were provided to families in all municipalities in 2020, but fewer people received these services than in 2019. In 2020, 76% of cases when it was necessary to ensure a safe environment for the child (prior to the assessment of the child’s situation) were due to intoxication of the child’s representatives from alcohol or other psychoactive substances and inability to take proper care of their child. But there were some positive trends: the duration of mobile teams’ work with the family was extended to 30 days in 2020, the number of applications to form mobile teams increased by 49% in comparison to 2019, the average number of mobile team meetings with family more than doubled (Narkotikų..., 2021a), the number of children’s day care centres providing day social care and education services and the number of children participating in children’s day care centre projects increased, also more NGO projects to develop independent and constructive families were selected for funding (Lietuvos..., 2021).

4.2. Early intervention measures for young people

One of the effective support measures for young people aged 14–21 who are experimenting with or irregularly using alcohol and/or drugs implemented in Lithuania is the Early Intervention Programme (based on the international programme ‘Fred goes net’). The aim of this programme is to motivate young people to stop using these substances before they become addicted. Participation in this Programme can be voluntary or compulsory (as a means of administrative impact or minimal childcare). Since 2018, the Programme has been implemented nationally in the form of live group sessions. Such activities could not be implemented or were restricted during the COVID-19 lockdowns.

Data, provided every year by the regional Public Health Bureaus shows that in 2020 the availability of early intervention services decreased by 35%
compared to 2019. Although, in 2021, the number of municipalities implementing the Programme was lower than before the pandemic, there are positive trends compared to 2020 – 10 more municipalities implemented the Programme than a year ago (in 2019 – 48 out of 60 municipalities, in 2020 – 31, in 2021 – 41) but still far from being implemented in all 60 municipalities. The number of young people who participated in the Programme and successfully completed it also decreased in 2020 compared to 2019. In 2021 the numbers increased but did not reach the pre-pandemic level (Fig. 10) (Narkotikų..., 2022).

4.3. Workplace-based prevention

The COVID-19 pandemic and quarantine created new challenges for governments, employers, employees and whole society. Changes in work conditions and stress could create potential risks to employees' safety and health, e.g., uncontrolled use of psychoactive substances, lack of communication, need for support, uncontrolled workplace safety. In February–April 2021, 551 workplace representatives were interviewed using an online survey by the Drug, Tobacco and Alcohol Control Department in order to assess the need and availability of substance use prevention measures in the workplaces of Lithuania, and the changes in activities caused by the pandemic. Half of the respondents were employers themselves (Narkotikų..., 2021b).

Survey results showed that 20.5% of workplaces no longer carried out substance use prevention measures they had taken before the quarantine or limited them. Only 2% of workplaces implemented more measures, including new ones, and in 7% of workplaces the scale of prevention measures remained the same, but their nature and methods of implementation changed. During the quarantine, implementation of all assessed substance use prevention and control measures decreased in at least some of the workplaces (Fig. 11). About a third of the workplaces that implemented measures such as improving employee mental health, education, counselling on psychoactive substance use problems, and assistance to employees with such problems stopped these activities during the quarantine. A quarter of workplaces that tested employees for alcohol use, and more than half of the workplaces that tested employees for drug use stopped testing during the quarantine.

5. Drug supply in the context of COVID-19

According to the Lithuanian Criminal Police Bureau, the drug market situation is regarded as stable in Lithuania, although the number of the quantities seized indicates some annual variations, which could be affected by lockdowns because of COVID-19 – increasing cocaine, amphetamine and
Fig. 10. Number of the Early Intervention Programme participants in 2019–2021.
Source: Narkotikų..., 2022.

Fig. 11. Implementation of different substance use prevention and control measures in the workplaces (2021, N=551 workplace representatives, %).
Source: Narkotikų..., 2021b.
methamphetamine quantities seized and a significant decrease in MDMA. In Lithuania, as in previous years, new psychoactive substances market can be assessed as small. No significant changes were noticed during COVID-19 period.

In 2020, there was a sharp increase in the quantities of cocaine, amphetamine and methamphetamine seizures compared with previous years (Fig. 12). Since 2019, the new trend has been observed – the amount of amphetamine seized exceeded the amount of methamphetamine. The same trend continued in 2020. The decrease in MDMA amounts seized are mostly affected by COVID-19 due to restrictions for all entertainment places (night clubs, pubs, bars, etc.).

Moreover, in 2020 the amount of hashish withdrawn from illicit circulation in Lithuania decreased sharply – from 1775 kg in 2019 to 3.8 kg in 2020, as well as amounts of cannabis (220 kg in 2019, 41 kg in 2020), presumably due to lockdowns because of COVID-19. According to studies, changes in the cannabis market were observed due to shortages of cannabis in the wholesale market. This may have been triggered by the closure of borders for individuals who smuggled cannabis in private vehicles. During the quarantine period, the closure of recreational places may have led to a decline in drug use, which did not result in a shortage in the retail market (EMCDDA, 2020b).

Following new psychoactive substances (NPS) trends, no significant changes were observed in previous years. Since 2016 up to now, in the illicit drug market heroin has been replaced by carfentanil and mixtures with carfentanil, and still no signs of heroin coming back to the Lithuanian market.

Despite the changes in amounts seized, average retail prices of almost all ‘traditional’ drugs remained stable. Only the price of amphetamine has increased, while the price of MDMA has decreased – as a result of reduced MDMA demand because of COVID-19.

### 6. Conclusions

In Lithuania the health and social consequences of COVID-19 are still in research, but during the pandemic period these trends were observed:

- Changes in psychoactive substance use prevention varied to different degrees depending on the setting and activity. School-based prevention programmes and after-school activities were most often continued and/or performed remotely. After a significant decrease in the availability of the Early Intervention Programme in 2020, there were positive trends in 2021, but participation in this Programme still did not reach the pre-pandemic level. Also, in 1 out of 5 workplaces, less preventive action was taken than before the pandemic.
- During the pandemic, parts of both prevention and monitoring activities moved online. Web surveys are a useful tool for collecting information.

---

**Fig. 12.** Quantities of seized cocaine, amphetamine, methamphetamine and MDMA, 2018–2020 (kg).

Source: Narkotikų..., 2021a.
on patterns of drug use from a larger sample of people who use illicit drugs and can complement and overcome some of their limitations of other data sources. While not being representative of the general population, carefully conducted web surveys may, nevertheless, provide valuable additional information about variations in use among different groups of people who use drugs.

- It may be assumed that the period of the lockdown changed the habits of the drug users and this made an impact on the seizures of drugs: the amount of amphetamine seized exceeded the amount of methamphetamine, and the amount of MDMA significantly decreased.
- The disruptions in the number of clients entering treatment strongly correlates with the lockdowns, mandatory testing and COVID-19 waves, which not only impaired the treatment accessibility but data collection as well. Other issues, such as the changes in clients’ behaviour which would be unrelated to COVID-19 pandemic, are also possible but are less likely due to the lack of evidence.
- Due to the COVID-19 lockdown, treatment services provision had to be changed and adapted to the restrictions – limited availability to some treatment services. Harm reduction services provision was not interrupted but the package of services was reduced.

References


COVID-19 and the drug situation in Lithuania
