1. Introduction

In Europe, the COVID-19 pandemic caused temporary shortages in supply drug chains due to restriction measures. In some cases, the process went higher with lower purity. The wholesale movement of drugs continued in the EU-member states due to commercial transportation in the region. Organized crime tried to adapt to the situation. As a result, in some cases, violence increased in this environment, especially among mid-level suppliers and distributors. The role of darknet and internet markets increased. Experts noted less home delivery, face-to-face contacts and cash transactions that may influence the behavioural patterns of users in the future (Europol, EMCDDA, 2020). Shortages of cannabis that resulted in inflated retail prices were observed in some EU states. Due to shortages in heroin supply, the substance was substituted with synthetic opioids, NPS, crack cocaine, amphetamine
or synthetic cathinones. Cocaine maritime trafficking continued at the same level and sometimes even increased in comparison to 2019. However, due to travel restrictions, air trafficking dramatically decreased. Synthetic drug production continued in the main European countries, like the Netherlands and Belgium. However, demand for those substances decreased due to the closure of the main distribution areas: discoteques, festivals and other entertainment venues (Europol, EMCDDA, 2020). This paper is an attempt to analyse the impact of the pandemic on drug-related issues in Ukraine.

In Ukraine, the first case of COVID-19 was detected on the 3rd of March 2020. In March–April 2020, the state of emergency was declared. The boarder was closed for foreign citizens, transportation ceased, and mandatory facial masks were required. On the 11th May, the first lockdown release was introduced with opening of stores, parks, and recreational places. In May, the boarder was partially opened, public transportation was restored and small gatherings were allowed. Lockdown release continued in June. Intercity transportation, sport and educational facilities were opened, air transportation was allowed. In August 2020, so-called “adaptive lockdown” was introduced. Anti-pandemic measures depended on the situation in the region. In November, some “weekend lockdown” was implemented. In August–December some restrictions were restored (e.g. limitation of recreational activities and public gatherings) (Dumchev et al., 2021). The COVID-19 pandemic also affected the drug market, drug use and treatment availability. The aim of this article is to analyse the impact of COVID-19 pandemic on the drug-related issues in Ukraine. This paper is based on the data and reports provided by the Institute for Psychiatry, Forensic Psychiatric Examination and Drug Monitoring of the Ministry of Health of Ukraine (Ukrainian National Focal Point), the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) and other stakeholders involved in drug supply and demand in this country. The Report on the Drug and Alcohol Situation in Ukraine will be the basic source of quantitative data. For the purposes of this article, the term “national drug report” will be used alternately. The most recent available data are from 2020 (Institute..., 2021). In 2020, EMCDDA published a trendspotter briefing dedicated to the impact of COVID-19 on drug-related issues in the European Neighbourhood Policy (ENP) countries. The methodology was based on a search of peer-reviewed articles in international journals. Two online surveys on drug-related health and security were conducted; the European Web Survey on Drugs: COVID-19 (EWSD-COVID) was conducted in ENP countries, and a virtually facilitated group of experts from ENP countries was involved in the study (EMCDDA, 2020). A total of 111 respondents residing in the ENP region completed the online EWSD-COVID questionnaire (with around 30 questions) in one of the 21 languages, including Russian and French, made available between 8 April and 25 May 2020. The authors of the briefing underline that web-surveys are not representative of the general population. However, they show us some highlights of drug users’ behaviour. Respondents from Ukraine accounted for 86% of the sample (EMCDDA, 2020). Another study entitled “Impact of the COVID-19 epidemic on drug markets, substance use patterns, and delivery of harm reduction and treatment services in Ukraine” used in this paper was conducted in Kyiv by Ukrainian researchers. In order to evaluate and describe drug-related behaviour and service use, 51 adult people who used drugs (PWUD) in the last 30 days were recruited and followed for six months. An online survey was conducted for data collection. Interviews were also conducted with people who work in the sphere of treatment services to explore changes in the drug scene and service provision. This research is also not representative for the general population but it highlights some findings in the sphere of treatment (Dumchev et al., 2021).

This paper is an attempt to compare quantitative data in the years 2018–2020 and explain the differences. It will also try to highlight the response of the Ukrainian drug treatment system to the pandemic.

2. Data sources

Secondary data analysis was used to collect statistics on drug markets, prevention and treatment in Ukraine (see: Boslaugh, 2007; Johnston, 2014). Of the three data sources used in this procedure (Heaton, 2008), only official databases from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) and from Ukrainian institutions (Institute for Psychiatry, Forensic Psychiatric Examination and Drug Monitoring of the Ministry of Health of Ukraine, Ministry of Internal Affairs of Ukraine, Prosecutor General’s Office of Ukraine) were used.

3. Drug markets

The Ukrainian drug market has some distinguishing features. Illicit substances like methadone and amphetamine-type stimulants are distributed without meeting with a dealer in person. Usually, a drug user contacts the dealer through a trusted phone number or encrypted messenger Telegram, transfers money
for a dose, receives the information on the place where the drug is hidden (so-called “dead drops”) (Dumchev et al., 2021). Usually, a drug is hidden in a public place and the consumer receives the photo where to find it. The addresses of Telegram-channels are written in the public space as graffiti, and police runs campaigns of removing them (Ministry…, 2021). There are also virtual drug forums that work as a marketplace. People can also share their opinions on the substances and complain about sellers if needed. Such marketplaces started to use pandemic as a promotion of stable work in the sphere of drug production and sales. According to journalist investigation, drug-related “professions” are not limited to “chemists” and dealers. There are also administrators, warehousemen, and packers. People involved in the drug trade or production have to pay deposit in order to avoid abuse (Garasim, 2021). Another distinguishing feature of the Ukrainian market is the popularity of acetylated opium (“shyrka”) among people who inject drugs (PWID), made by dealers and users at home from locally grown poppy (EMCDDA, 2020).

According to the EMCDDA publication, drug prices have increased during the pandemic in Ukraine. A survey among national law enforcement experts shows that prices of cannabis (herbal and resin), heroin, amphetamines and NPS have slightly increased. However, prices of cocaine and MDMA have increased by more than 20%. The only data regarding changes of drug purity is available for cocaine showing its decrease (EMCDDA, 2020). The availability of MDMA and cocaine has decreased; however, a slight increase in amphetamines and NPS has been noticed (EMCDDA, 2020). EMCDDA together with Europol monitored data on online drug distribution. Data from Ukraine indicated that the number of detected drug sales on darknet markets in the first few months of 2020 was substantially higher that the number of detected drug sales for the same period in 2019. However, almost half of EWSID-COVID respondents from Ukraine reported no change in the way in which they had obtained illicit substances, with only a small number indicating that they had purchased illicit drugs online and on the darknet more often than they had before the COVID-19 pandemic (EMCDDA, 2020). EMCDDA reported a decrease in drug availability. This also affected the behaviour of drug users. The research showed that nearly a quarter of people who use drugs did not change their drug use habits, while three out of 10 indicated using fewer drugs and one in 10 reported stopping drug use following the emergence of the COVID-19 pandemic (EMCDDA, 2020). The available data show that during the pandemic cannabis was used more frequently or in greater quantity. Cannabis was also reported as a substance that was substituted by alcohol. MDMA/ecstasy, which is considered a typical nightlife drug, was used less frequently (EMCDDA, 2020). Data from experts and targeted studies indicate that some MDMA users may have discontinued use, while others may have opted for alternatives, such as ketamine (EMCDDA, 2020). Some users may have returned to the home-based production of stimulants, such as the production of a substance known locally as ‘vint’. However, the scale of this activity, as well as its potential to significantly affect local markets, remains unknown (EMCDDA, 2020). The research indicated misuse of opioid substitution treatment medicines (methadone) in Ukraine prescribed by private practitioners (EMCDDA, 2020). According to the survey, the most cited explanation for reductions in drug use was fewer social opportunities, constraints on living arrangements and loss of income/less money to buy drugs. Health concerns, financial uncertainty and reduced ability to buy and collect drugs have also been mentioned. On the other hand, one in five participants of the online survey reported increasing their drug use during the period under study, with reasons reported being boredom, anxiety, need to cope with COVID-19 and stockpiled drugs. A small proportion of respondents were unable to assess a change in their illicit drug use pattern since the start of the COVID-19 pandemic (EMCDDA, 2020).

According to the research conducted in Kyiv, prior to March 2020 the main source of illicit methadone were so-called “dead drops”. However, till the end of September people bought less from this source. The available data show that people started to buy the substance more frequently form dealers and intermediaries. In the case of illicit methadone, the importance of the internet has totally decreased. However, prior to March, some people used it as the main source. The most popular source of medical methadone was pharmacy, sometimes dealers and intermediaries. The role of the internet increased in August. However, it was not declared as the main source of this substance (Dumchev et al., 2021). The authors of the research notice:

Importantly, the decreasing trend in the use of illicit methadone, and the compensatory increase in the use of medical methadone obtained by prescription did not reverse after the restrictions for public transportation, and other epidemic control measures were released. This suggests that this change in the drug scene became sustainable, at least during the study period, due to the convenience and other perceived advantages of the prescription source (Dumchev et al., 2021).
Ukrainian research showed that some patients in the governmental opioid substitution treatment (OST) facilities were transferred to 10-day take-home doses. However, there were indicators that medical opioids were sold on the illicit market. Moreover, PWUD and service providers tried to adapt to the challenges of the pandemic. Private physicians started to open new sites (at least 40 in Kyiv), offering discounts for new customers. In this way, one person could be a client of several such treatment methadone sites, buying the substance cheaper and more than needed, and in fact, reselling it afterwards. Dealers made “dead drops” closer to consumer’s place. With the renewal of public transportation, drug availability gradually returned to the pre-pandemic situation (Dumchev et al., 2021).

The official statistics show a rise in drug-related administrative offences in 2020 (compared to 2019) and a decline in criminal offences (Table 1, Table 2) (Institute..., 2021). The following tables show the dynamics of registered and judicially charged cases of drug-related administrative and criminal offences.

**Table 1. Drug-Related Administrative Offences in 2017–2020**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of registered cases</th>
<th>Number of judged cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>7,879</td>
<td>6,775</td>
</tr>
<tr>
<td>2018</td>
<td>7,190</td>
<td>6,094</td>
</tr>
<tr>
<td>2019</td>
<td>6,377</td>
<td>5,408</td>
</tr>
<tr>
<td>2020</td>
<td>7,567</td>
<td>6,348</td>
</tr>
</tbody>
</table>

Source: Institute..., 2021; based on Judicial Statistics.

**Table 2. Number of Registered Drug-Related Criminal Offences in 2016–2020***

<table>
<thead>
<tr>
<th>Year</th>
<th>For selling purposes (cases)</th>
<th>For not selling purposes (cases)</th>
<th>People charged (persons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>2,293</td>
<td>17,398</td>
<td>10,357</td>
</tr>
<tr>
<td>2017</td>
<td>5,029</td>
<td>20,071</td>
<td>15,440</td>
</tr>
<tr>
<td>2018</td>
<td>5,453</td>
<td>18,022</td>
<td>13,160</td>
</tr>
<tr>
<td>2019</td>
<td>6,382</td>
<td>18,623</td>
<td>13,309</td>
</tr>
<tr>
<td>2020</td>
<td>8,392</td>
<td>15,735</td>
<td>13,249</td>
</tr>
</tbody>
</table>

* Illegal production, manufacture, purchasing, storage, transportation, shipment of drugs, psychotropic substances or their analogues not for selling purposes and for selling purposes

Source: Institute..., 2021; based on Prosecutor General’s Office of Ukraine. 2016, 2017, 2018 – data updates based on the information from all the law enforcement authorities.

**4. Trends**

The number of drug users who applied for a treatment during the COVID-19 pandemic has not significantly changed. However, we can observe a significant decrease after 2014. It can be explained by the Russian occupation of Crimea, Donetsk and Luhansk regions and a lack of data availability on the occupied territories (Institute..., 2021). The most prevalent group of substances is opioids (about 40,000 cases). Cannabinoids is the second group (about 4,700 cases) (Institute..., 2021). However, the available data show us a significant increase in patients who applied for treatment of cocaine addiction. In 2018, there were 40 patients, in 2019 – 346 and in 2020 – 274 cases. We can observe some increase among stimulant users after 2017 (1,184 in 2017, 1,557 in 2018, 1,457 in 2019 and 1,441 in 2020) (Institute..., 2021).

According to the Ukrainian national drug report, in 2018, the data collection form and method changed, and Ukraine started collecting data on infectious diseases of only people who inject drugs. Comparing to 2019, in 2020 the number of HIV, HCV, HBV detections increased (Institute..., 2021). The number of deaths related to drug use and poisoning has been increasing since 2017 (in 2017 – 251, 2020 – 589 cases). In 2020, 90% of deaths were among males. The most frequent deaths are among people at the age of 30–39. Half of the deaths were caused by opioids (50.2%) (Institute..., 2021). A similar situation was in 2018: 84% of male deaths (Institute..., 2019). However, looking at the comparison between 2019 and 2020, drug related deaths increased almost in every age group (Institute..., 2021).

The Ukrainian research “Impact of the COVID-19 epidemic on drug markets, substance use patterns, and delivery of harm reduction and treatment services in Ukraine” showed that 55% of the participants, increasing to 76% in late July and to 80% by late September were employed and declared full- or part-time job as their main source of income (Dumchev et al., 2021). Prior to March 2020, over 71% of the PWUD cohort used illicit methadone. This number decreased till the end of September 2020. However, the situation is totally opposite with medical methadone: the use in the same period significantly increased. People switched from illicit methadone to medical one. Quantitative results of the cited research showed that the use of amphetamine fluctuated and mostly remained low at about 10%, then reduced to 4–7% in July–August and September. There was a noticeable decline in the use of cannabis (from 20% in April to 13% in September). Antihistamines, mostly used as an adjuvant to injected...
opioids, decreased from 20% in April to 13–15% in September. The use of heroin, homemade opioids and other drugs (MDMA, LSD, others) was negligible. Alcohol consumption increased in April to 46% compared to the pre-COVID level (37%), but then steadily decreased to about 30% in the last rounds of the survey (Dumchev et al., 2021). According to qualitative data, the subjective availability of drugs changed during the pandemic. At the beginning of COVID-19, PWUD noted harder access to their primary drug. However, the number of users who declared harder access was gradually decreasing and at the end of September it declined to 0% (Dumchev et al., 2021).

At the beginning of the lockdown, the prices slightly increased. However, in June they returned to the previous rates. Some users claimed that sellers decreased the process or proposed some bonuses (Dumchev et al., 2021).

The available data suggest that the trend in overdose notably increased with the beginning of the pandemic. The main substances that caused overdose were mainly illicit and medical methadone, sometimes street buprenorphine, rarely amphetamine, alcohol, antihistamines (Dumchev et al., 2021). These data prove misuse of substitution treatment substances during COVID-19.

5. Prevention and treatment

The prevention system in Ukraine covers certain social and age groups of the population. According to the Ministry of Education and Science of Ukraine, the prevention of use of psychoactive substances is integrated into secondary education and is a part of the school curriculum. The Government Standard is approved in Ukraine; Centres for Social Services for Families, Children and Youth (under the Ministry of Social Policy of Ukraine) provide services for families who are in difficult life circumstances related to alcohol and narcotic drug or psychotropic substances use. The Ministry of Youth and Sport of Ukraine in partnership with non-governmental organisations organises national and regional events to popularise and promote healthy lifestyles. In 2018, the most frequent preventive measure was individual sessions (550,382 sessions – 95% of overall events). Lectures were in the second place (17,208 events) (Institute..., 2019). In 2020, according to the Ministry of Education and Science of Ukraine, the most popular preventive measure were trainings (288,224 events – 51.6%), in the second place there were individual interviews (115,702 – 20.7%), then educational hours (80,115 events – 14.3%) (Institute..., 2021). A number of families in difficult life circumstances that were provided with support of social services has slightly decreased: 12,924 families in 2018, 9,600 – in 2020 (Institute..., 2019, 2021).

The governmental OST programs quickly adapted to the epidemic. Before COVID-19, about 50–60% of the OST patients received substitution therapy every day on-site. However, in March, 90% of the clients were transferred to take-home administration of methadone/buprenorphine for up to 10 days (Dumchev et al., 2021). According to the qualitative interviews, governmental narcological clinics in Kyiv stopped accepting new patients to treatment programmes. So, some people were unable to receive services, despite their motivation, and were placed on the waiting list. Those patients who were suspected of methadone misuse at home were taken back to on-site treatment. Overall, OST facilities returned to their normal work, providing standard services. Moreover, free COVID-tests were provided for people who wanted to start treatment (Dumchev et al., 2021).

6. Conclusions

A case of Ukraine is not very different from the EU-member countries. Anti-pandemic measures made every actor on the drug scene adapt to the new reality. Limitations imposed in the transportation system caused shortages in supply chains. This caused a lack of availability of some drugs and, naturally, an increase in the prices. PWUD started to find substitutes of their primary drug that caused risky behaviours, such as the use of acetylated opium ("shyrka"), misuse of the substances and overdose. Darknet markets offered sales of their goods. The importance of internet decreased. A distinguishing feature of the Ukrainian market is use of Telegram messenger for contactless drug trade. Such “marketplaces” started to use the pandemic as a promotion of a “stable job” during lockdown. PWUD started to buy more frequently form dealers and intermediaries. Sellers made so-called “dead-drops” more convenient for consumers and closer to their places. However, with the renewal of public transportation drug availability gradually returned to the pre-pandemic situation.

There is also a notable change in the Ukrainian prevention system. In 2020, trainings and individual interviews became a more popular preventive measure. However, the number of families in difficult life circumstances that were provided with support of social services slightly decreased. It may be explained with the lockdown. OST facilities changed their operating mode and did not accept
new clients. Home-treatment was introduced. The patients were provided with medical methadone for 10 days. Private facilities appeared rapidly. However, some facts indicate methadone misuse. Private physicians abused methadone prescriptions, and PWUD could be the patients of several facilities, buying the substance several times and reselling it. Nonetheless, patients who were suspected of such misuse were treated on-site in an OST facility.

To summarise, at the very beginning of the pandemic, there were problems with access to substances and treatment. However, those challenges were gradually eliminated with the restriction measures. Sellers treated lockdown as a chance to attract new workers and clients. Physicians used pandemic as a chance to open a private facility, attract new patients and give them a chance to buy medical methadone. Nowadays, the majority of those problems are not relevant as the restrictions are gradually being suspended. The system has adapted to the situation and has returned to the pre-pandemic life.

References


