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HAS THE COVID-19 PANDEMIC CHANGED SUBSTANCE USE PATTERNS, DRUG MARKET AND DRUG RESPONSE IN POLAND?

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Abstract

The aim of this paper is to examine the impact of COVID-19 on the prevalence of substance use. Moreover, the analysis will focus on the impact of the pandemic on the drug market and drug-related crime in Poland. The tested hypothesis assumes that the COVID-19 pandemic has increased the prevalence of substance use and the related problems, and that the availability of drugs decreased. The data presented and processed for the purposes of this publication come from the monitoring of drugs and drug addiction and from different studies from 2020 to 2022. The analyses presented in the article do not show an increase in the use of psychoactive substances during the pandemic; furthermore, it is possible to indicate a decrease in the consumption of alcoholic beverages in 2020. It seems that the COVID-19 pandemic did not have a large impact on the availability and use of new psychoactive substances (NPS). The analysis of the drug market during the pandemic COVID-19 did not show a fall in the availability of drugs at the national level.

Key words

Covid-19, drug use patterns, drugs market, new psychoactive substances, drug treatment, Poland.

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1. Introduction

The appearance of the COVID-19 pandemic resulted in far-reaching changes in the functioning of Polish society in many dimensions, such as health care (Sagan et al., 2021; education (Hibszter, Tracz, 2021), or spatial mobility (Stępień et al., 2021). However, in the context of this study, a wide spectrum of symptoms

and problems of a psychological nature is the most important (Kęsieska-Koszałka, 2021). The problems with the mental health of Polish society are not exceptional, as they have affected all societies in the world (cf. Ahrens et al., 2021; Chawla et al., 2021; Saladino et al., 2021). These problems may have influenced the drug situation as well.

The aim of this paper is to examine the impact of COVID-19 on the prevalence of substance use. Moreover, the analysis will focus on the impact of the pandemic on the drug market and drug-related crime in Poland. The tested hypothesis assumes that the COVID-19 pandemic has increased the prevalence of substance use and the related problems, and that the availability of drugs decreased.

2. Data

The data presented and processed for the purposes of this publication come from the monitoring of drugs and drug addiction performed by the Research, Monitoring and International Cooperation Department of the National Centre for Prevention of Addictions (PI: Krajowe Centrum Przeciwdziałania Uzależnieniom (KCPU)) – Polish Reitox Focal Point EMCDDA as well as research commissioned and conducted by KCPU. Youth research was conducted by CBOS Public Opinion and Research Centre and KCPU towards the end of 2021. Research among users injecting drugs was conducted by the National Institute of Public Health – National Institute of Hygiene (NIZP PZH-PIB) at the beginning of 2021 and by KCPU the end of 2020. Two studies on alcohol were commissioned by KCPU in 2020. Moreover, in 2020, KCPU conducted a rapid assessment of drug services concerning the impact of the COVID-19 pandemic supplemented by three online in-depth interviews. In 2021, KCPU collected data from local governments (*boroughs*) on the implementation of local drugs strategies, and in the same year, an online survey among drug users (Web Survey) was conducted in partnership with the EMCDDA. The following data were provided by the institutions combating drugs and drug addictions: proceedings instigated and suspects by the Police Headquarters (KGP), drug seizures by the KGP and the Border Guard, purity of drugs by the Central Forensic Laboratory of the Police, drug-related deaths by Statistics Poland (GUS), and data on new psychoactive substances by the laboratories under the Early Warning System of KCPU.

3. Results and discussion

3.1. Substance use among youth

At the end of 2021, 'Youth' survey on the prevalence of psychoactive substances was conducted by the CBOS Public Opinion and Research Centre and KCPU. This school-based project was implemented in October and November on a representative sample

(n=1531) of students from final grades of secondary schools (18-year-olds). The results of the 2021 survey were compared with the measurement from the end of 2018, i.e. the time before the COVID-19 pandemic. As the results showed, lifetime prevalence rates for cannabis use stood at 36% (37.5% in 2018), last 12-month prevalence was 19.4% (20.2% in 2018) and last 30-day prevalence was 9.3% (9.8% in 2018). Cannabis is the most prevalent illegal psychoactive substance in Europe (EMCDDA, 2020). Amphetamine came second in terms of prevalence in the analysed survey at 5.9% (6.0% in 2018 – lifetime prevalence), 3.1% in the last 12 months (3.2% in 2018) and 1.7% in the last 30 days (1.3% in 2018). Taking a closer look at ecstasy use (MDMA), we can observe that this drug has been used at least once in lifetime by 3.8% of the respondents (4.2% in 2018), 1.8% of the respondents have used it in the last 12 months (1.8% in 2018) and 0.9% in the last 30 days (1.1% in 2018). In the survey, which has been conducted since 1992, students were asked to report their drug use in the last 12 months without specifying the substances. According to the latest survey, this rate stood at 13.1%, while in 2018 it was 16.0% (Fundacja CBOS..., 2022).

3.2. Alcohol consumption during COVID-19 pandemic

The Youth survey carried out by the CBOS Public Opinion and Research Centre and the National Centre for Prevention of Addictions examined the prevalence of alcohol use. In 2021, in the last month prior to the research, 63.0% (74% in 2018) of the students drank beer at least once, 58.9% (62.0% in 2018) drank vodka and other liquor, and 34.8% (43.0% in 2018) consumed wine. In comparison with 2018, there was a fall in the alcohol use rates among students at the end of 2021 (Fundacja CBOS..., 2022). In 2020, the State Agency for the Prevention of Alcohol-Related Problems (PARPA) commissioned a study entitled "Life in the age of a pandemic" (Chodkiewicz, 2020). The research contractor was the Institute of Psychology of the University of Łódź. The study included a group of people (n=177) who took part in the online research twice. The first measurement took place in April 2020 and the second in September 2020. One of the objectives of the study was to answer the question about the use of psychoactive substances by the respondents during the pandemic as well as to learn about the factors related to alcohol use during this period. The results of the study revealed, on the one hand, a decrease in the percentage of people who reported an increase in the amount of alcohol consumed since the pandemic, and, on the other

hand, a decrease in the percentage of people who declared themselves abstinent (Chodkiewicz, 2020).

In September and October 2020, a nationwide survey by the State Agency for the Prevention of Alcohol-Related Problems was carried out using the CAPI method on a sample of 2,000 people randomly selected from the general population aged 18+. The vast majority of alcohol consumers said that the pandemic had not changed their current pattern of alcohol consumption (79.4%). According to the study, 8.1% of people declared that they drank more during the pandemic, and the same percentage of consumers reported that they drank less alcohol during the pandemic (Rowicka et al., 2021).

Referring to the consumption of alcoholic beverages by adolescents, it is worth noting that average yearly consumption of pure alcohol per capita stood at 9.62 litres in 2020, and it was lower compared to 2019 (9.78). This trend was rising from 2014 only to be halted by the COVID-19 pandemic in 2020 (PARPA, 2022).

3.3. Infections among injecting drug users

Between 1985, i.e. the moment of introducing a routine epidemiological monitoring system for HIV/AIDS in Poland, and the end of 2020, 26,383 HIV infections were reported. Out of these infections 6,416 (24.3%) were in people who injected drugs, including 4,830 men (75%) and 1,529 women (24%) (in 57 cases the information on gender was missing). Analysing the above monitoring period in terms

of AIDS, 3,815 cases were diagnosed. Out of these, 1,608 (42%) were people who injected drugs (PWID), including 1,271 men (79%) and 337 (21%) women. Figure 1 presents the number of new HIV infections reported until 31 December 2020 by the year of detection. Last data presented a decreased number of new HIV infections including people who injected drugs (Polish Harms and harm reduction workbook, 2021).

The analysis of the impact of the pandemic on the problem of drugs and drug addiction includes the research conducted by the National Institute of Public Health – National Institute of Hygiene (NIZP PZH-PIB). Upon the request of KCPU, the research covered the topic of SARS-CoV-2. The cross-sectional survey among injecting drug users was conducted in three Polish cities: Chorzow, Warsaw and Wroclaw. The survey featured rapid HIV tests (anti-HIV antibodies), HCV tests (anti-HCV antibodies), *Treponema Pallidum* test (IgG/IgM), SARS-CoV-2 (IgG/IgM) tests as well as a questionnaire interview (Zakrzewska, Rosińska, 2022). The survey intake was conducted by means of *Respondent Driven Sampling* (RDS) (Heckathorn, 1997). The survey included participants over the age of 18 who had injected psychoactive substances at least once in a lifetime (intravenously, intramuscularly and/or hypodermically). The project lasted from February to March 2021. Almost three quarters of the respondents were male. The most numerous age group included individuals aged 35+. Most of the respondents had injected drugs in the last 12 months

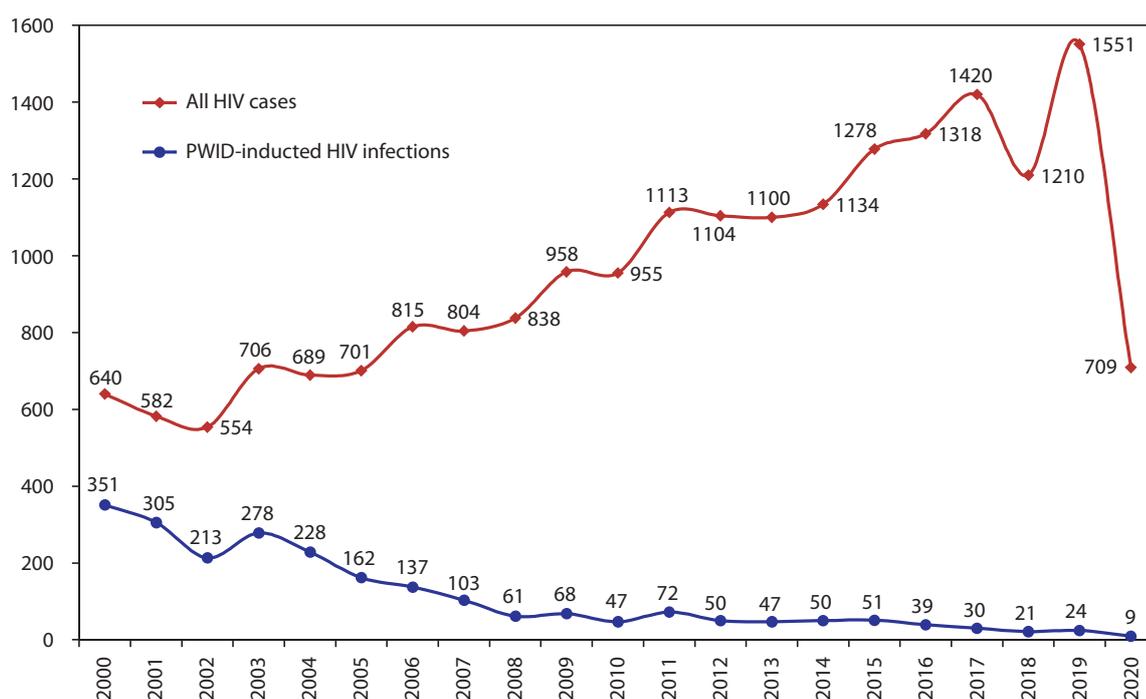


Fig. 1. Number of new HIV infections, including people who inject drugs (recorded number) detected in years 2000–2020.

Source: EMCDDA, 2021b.

prior to research (74.5%) (n = 150). The results indicated varied prevalence rates in the respective cities. In the city of Chorzów, the most prevalent substance was morphine (76.9%). In the other two cities, it was heroin: 50% in Warsaw and 82.4% in Wrocław. Based on rapid tests and estimation, HIV prevalence in the population stood at 8% remaining at a level similar to the survey of 2017 (Zakrzewska, Rosińska, 2022). HCV prevalence in the population, according to rapid test results and the RDS estimation, was at 31.2%, with indications similar, though somewhat higher, to those of 2017 (Zakrzewska, Roksińska, 2022). Prevalence of IgM/IgG antibodies against SARS-CoV-2 in the analysed sample stood at 2.8%, while, using the RDS method, it was estimated in the population at 1.6%. Since April 2021 a representative sample of Poles has been recruited in order to verify the SARS-CoV-2 seroprevalence level. The OBSER-CO research methodology was different – the participants were tested by means of anti-S ELISA test in central laboratories. Compared to the OBSER-CO, the results are much lower – 49% (n = 145) (Instytut..., 2021). According to the NIZP PZH-PIB researchers, the Polish data and the Swedish data (Lindqvist et al., 2021) suggest that drug users could have been less exposed to SARS-CoV-2 transmission than the general population. They argue that it can be explained, for example, by the limited spread and homogeneity of social networks.

The survey primarily included clients of syringe and needle exchange programmes as well as opioid substitution treatment patients. As part of monitoring of the scale and type of psychoactive substance use among injecting drug users, questionnaire interviews are conducted every two years by KCPU among injecting drug users. In 2018 (n = 419) and in 2020 (n = 327), the studies were conducted in November. Over the course of two weeks, harm reduction programmes' staff conducted questionnaire interviews with clients of needle and syringe programs. The results of the study showed a substantial decrease in the percentage of respondents using alcohol, marijuana, amphetamines, cocaine, cathinone and Polish heroin (Fig. 2). The percentage of respondents using methadone increased (Dalmata, 2021).

3.4. Impact of the COVID-19 pandemic on drug use according to the Web Survey

Soon after the first outbreak of the COVID 19 pandemic, a European online survey was conducted by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Crucial information on the impact of COVID-19 on drug users and on the services that support them was collected via a special round of the European Web Survey on Drugs, launched in April 2020 (two months of data collection). The survey — the Mini European Web Survey on Drugs: COVID-19 — was coordinated by the EMCDDA in collaboration with its Reitox network of national

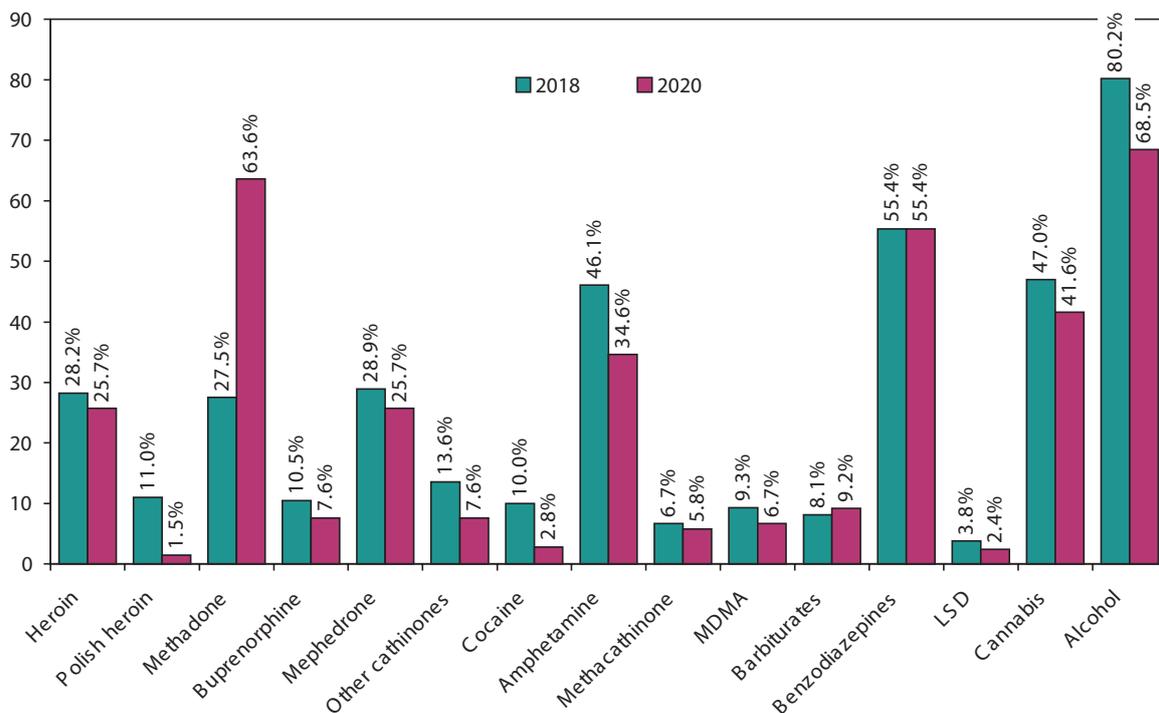


Fig. 2. Drug use prevalence among syringe/needle exchange programmes clients – last month prevalence (%), 2018 and 2020.

Source: Dalmata, 2021; Malczewski, Jabłoński, 2020.

focal points. The online questionnaire was filled out by 500 Poles using illegal psychoactive substances who had been recruited by Facebook. The sample included adults between the ages of 18 and 69, 157 females, 320 males, 18 nonbinary people and 4 other respondents who preferred not to tell their gender. The majority of subjects were currently living in cities (almost 70%) and towns (almost 20%), while 10% were living in the countryside when the survey was conducted. The purpose of the survey was to find out if and how the pandemic changed the way people used drugs and if they received the help

they needed. The majority of people in Poland who used cannabis in the last 30 days in the first wave of the COVID-19 pandemic were using it at least once a month (32%), 41% smoked a few times a week, and 13% were doing it every day (Fig. 3). Among the respondents who used cannabis in one-year period, also the majority answered that they were using it at least once a month (24%) (Fig. 4). The findings were very similar to the results of the previous 2017 European Web Survey on Drugs (N=2625), in which 21% of subjects gave the same answer (Fig 5).

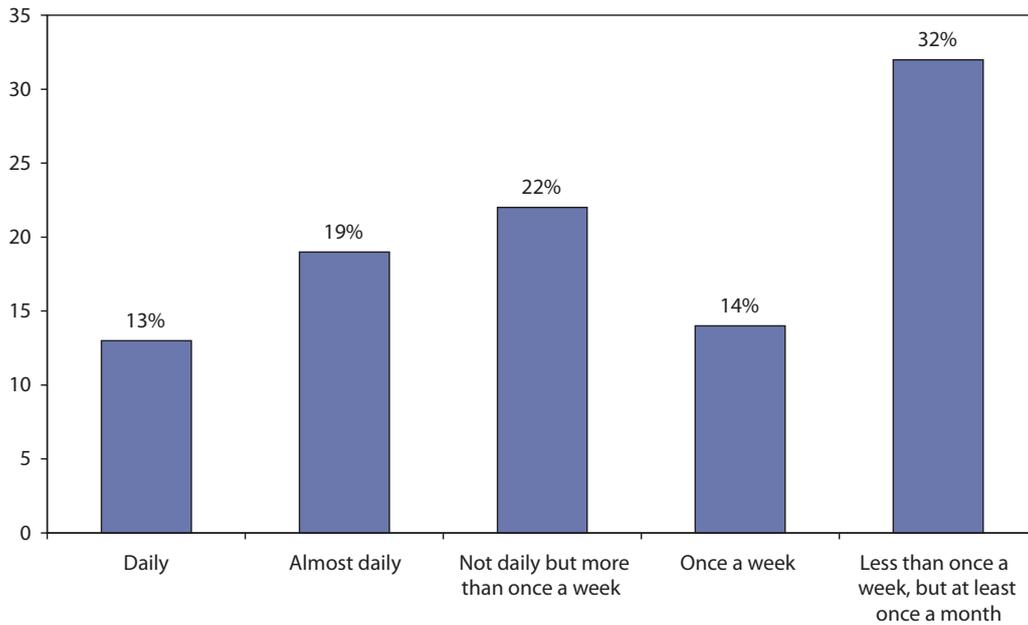


Fig. 3. Cannabis use patterns – the frequency of using cannabis in the past 30 days (%) N= 331, 2020.

Source: own calculations based on Web Survey 2020 data for Poland.

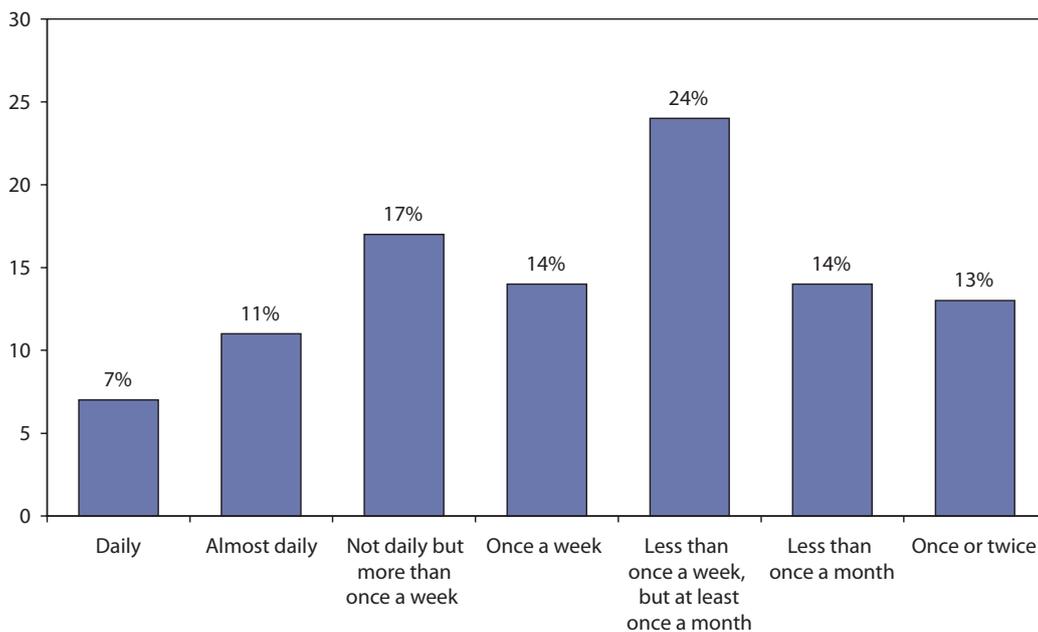


Fig. 4. Cannabis use patterns – the frequency of using cannabis in the past 12 months (%) N=331, 2020.

Source: own calculations based on Web Survey 2020 data for Poland.

The comparison of the results of the Web Survey from 2020 (Fig. 4) to the outcomes of the previous one from 2017 (Fig. 5) shows that the results for cannabis use in the last 12 months are similar for both editions of the study. Most of the respondents reported using cannabis at least once a month, but less than once a week; the second most frequently chosen option was using cannabis more than once a week. Weekly and daily usage both slightly rose from the survey in 2017 to the 2020 survey. It is

noteworthy that in 2017 there was a question about weed alone while in 2020 about weed and resin combined. Nevertheless, there are not many resin users in Poland.

The numbers for MDMA usage are lower than in the case of cannabis. Only 109 of 500 respondents admitted using it in the last 30 days. Most survey respondents (87%) reported that they used ecstasy at least once a month, but only 6% used it once a week and 7% even more often (Fig 6). In the 2017 Web

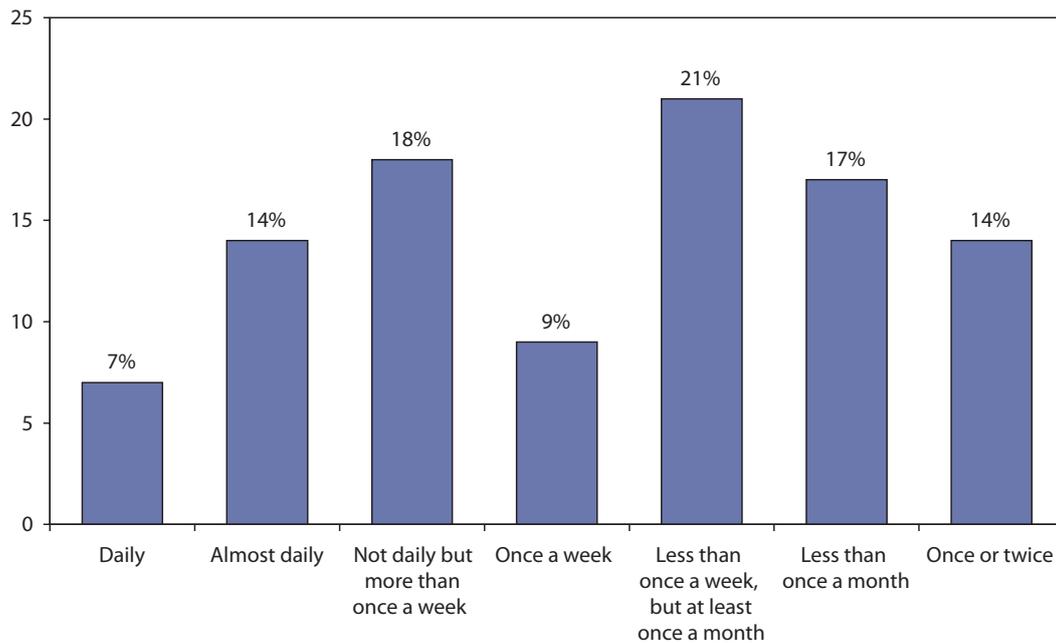


Fig. 5. Cannabis use patterns – the frequency of using weed/skunk in the past 12 months (%) N=2625, Web Survey 2017. Source: EMCDDA calculation- Web Survey 2017 data for Poland.

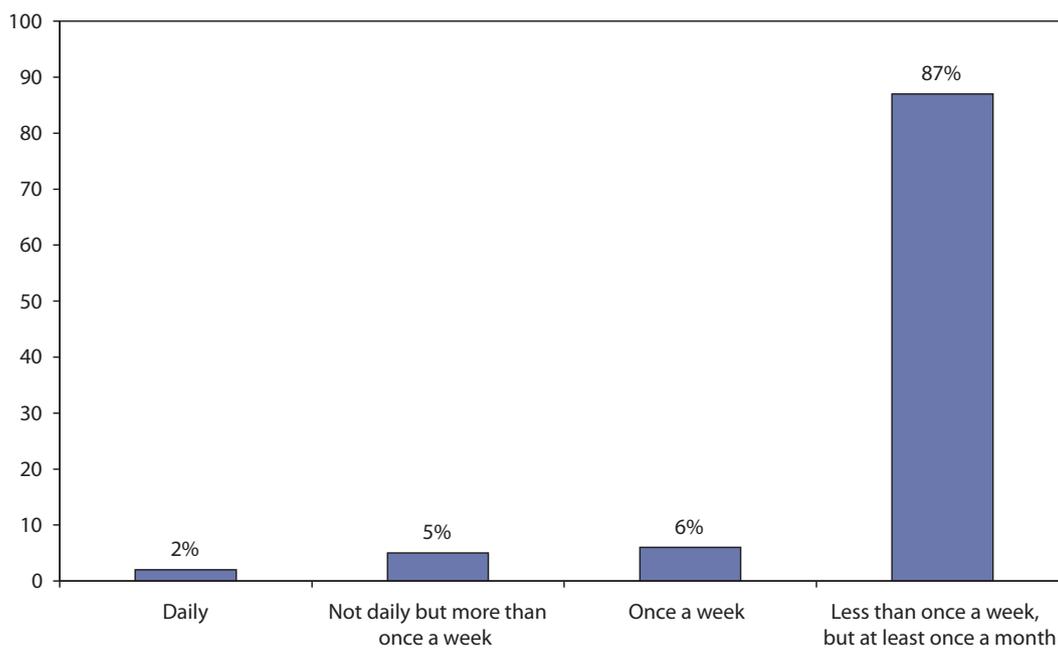


Fig. 6. MDMA use patterns – the frequency of using Ecstasy/MDMA in the past 30 days (%) N=109, Web Survey 2020. Source: own calculations based on Web Survey 2020 data for Poland.

Survey on Drugs, 45% declared that they had taken MDMA once in the last 30 days, and 25% reported that they had taken it on two occasions during that period.

Considering that MDMA is known as a “party drug”, it is surprising that its users did not change their pattern of use, comparing to the Web Survey from before the pandemic. In both studies, MDMA

was declared to be used less than once a month by 41% of the respondents in 2020 and by 31% in 2017) and once or twice in 12 months by 40% of the respondents in 2017 and by 36% in 2020 (Fig. 7). On the European scale (European Web Survey on Drugs 2021 N=48469), 35% declared taking MDMA on at least one occasion in the last 12 months.

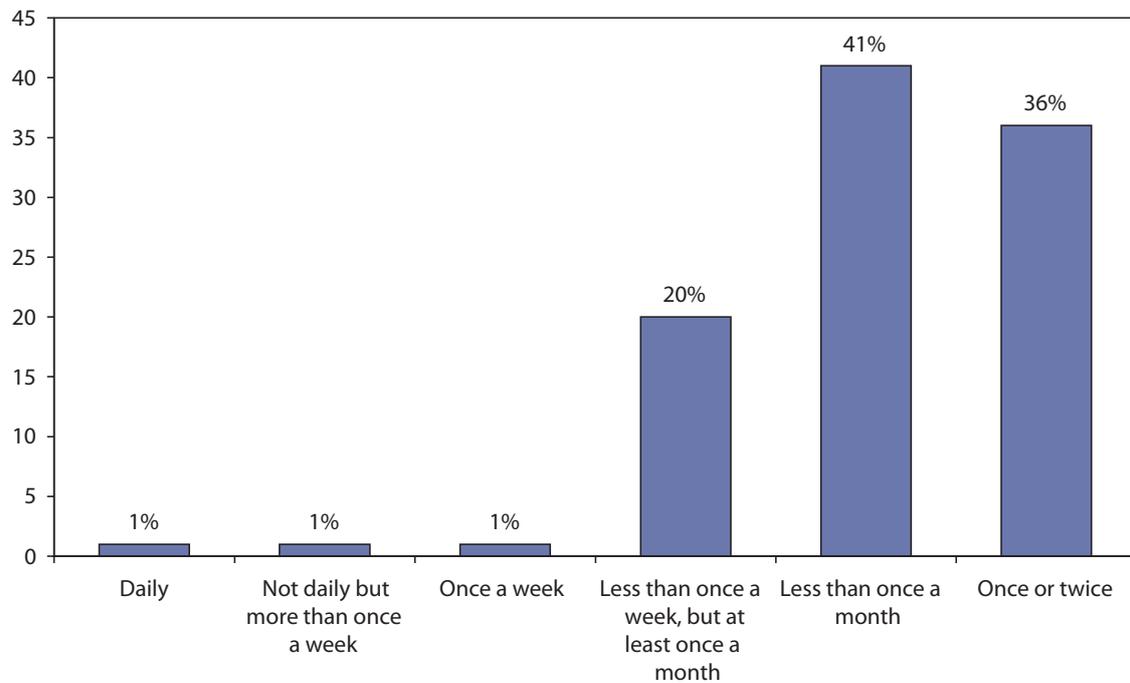


Fig. 7. MDMA use patterns – the frequency of using Ecstasy/MDMA in the past 12 months (%) N=298, Web Survey 2020.

Source: own calculations based on Web Survey 2020 data for Poland.

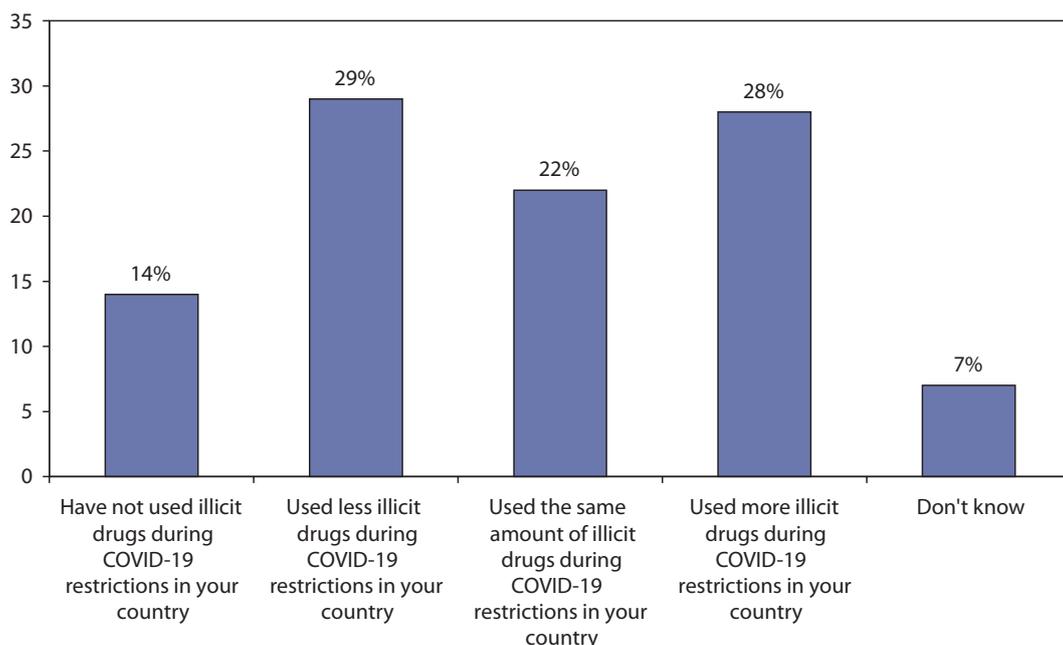


Fig. 8. The amount of illicit drugs used since the start of the COVID-19 epidemic in the respondent's country (%) N=452, Web Survey 2020.

Source: own calculations based on Web Survey 2020 data for Poland.

The 2020 Web Survey mainly focused on the changes in the patterns of use caused by the COVID-19 pandemic. 29% (n = 452) reported that they had used less drugs during the period of COVID-19 restrictions in Poland, but 28% of the same group declared that they had used more illicit psychoactive substances than before the COVID restrictions were introduced. 22% of the respondents did not change the amount of drugs they used (Fig. 8).

3.5. The impact of COVID-19 on the response to the addiction problem

In the course of monitoring the drug services and implementing preventive activities during the COVID-19 pandemic, the National Bureau for Drug Prevention (NBDP) conducted two analyses of the situation in 2020. At the beginning of the pandemic (in April and May 2020), questionnaire surveys among staff of drug treatment units were carried out. In November 2020 three online group discussion sessions were held on the impact of the pandemic on drug services. The first session was attended by Provincial Drug Information Experts (16 November). The second session (17 November) included representatives of drug and alcohol treatment service, while the third meeting was organised for staff members of opioid substitution therapy (OST) facilities (18 November 2020). During the discussion on the functioning of treatment units during the COVID-19 pandemic, the representatives of the implementors of opioid substitution therapy programmes suggested various strategies and changes to modify the operation of the services in order to meet the sanitary requirements (Malczewski, Jabłoński, 2020). The waiting time to admit patients to treatment units was getting extended, as admissions were only allowed following a negative coronavirus test. Some activities were suspended in treatment and OST centres (e.g. the Patient's Club) in order to minimise social contact between patients. Most programmes ceased to take in patients during the lockdown due to the inability to hold a diagnostic visit. 15-minute breaks were introduced to allow for social distance between patients as they received their methadone doses. Therapeutic groups in substitution treatment programmes were suspended while all the individual therapeutic sessions continued normally. Changes in the operation of the programmes were introduced, e.g. cancelling patients meetings, communicating in paper, drawing up information leaflets on new procedures, etc. (Malczewski, Jabłoński, 2020). In one facility, a quarantine room was set up. Most of the panellists signalled that the cost of the COVID-19 diagnostic tests was borne by the treatment units, especially in large cities. It was a common practice

since contacting sanitary services was impossible due to overloading. Diagnostic tests were conducted selectively. Due to high costs of testing, only the individuals suspected of being positive were tested. In the case of in-hospital programmes, all the nurses employed in hospitals were regularly tested for COVID-19, as it was a standard procedure. The COVID-19 pandemic did not result in a considerable increase in the number of OST patients. However, in some programmes, a trend of more frequent reporting of first-time patients to the programme was observed. It is worth noting that according to the panellists, the patients strictly followed the restrictions, and whenever a patient was suspected of being coronavirus positive, they were provided with methadone outside the facility. Patients made sure they were wearing face masks and gloves, sanitized their hands and asked for the door handles to be sanitized once they had left the facility. OST programmes introduced various solutions during the pandemic in order to eliminate or reduce the risk of contracting COVID-19. During the group discussion, a number of challenges affecting the operation of drug services during the COVID-19 pandemic were identified. Firstly, it was necessary to follow sanitary procedures in order to protect the staff and patients, which required online services wherever possible. The issue of employing new staff was raised, as many employees were on sick leaves or self-isolation. Family therapy was reduced as a number of facilities were unable to admit families due to sanitary restrictions. Patients found it hard to get to the facility. Sometimes, it was impossible due to changes in the operation of public transport. Treatment units tried to continue their services despite the emerging problems (Malczewski, Jabłoński, 2020). Moreover, due to the pandemic, drug services incurred additional costs such as the purchase of computers to enable work in the new circumstances, for telehealth purposes, contacting other staff members, conducting interviews, for patient use (one facility) or the purchase of disinfection lamps. Such expenses had not been included in the budgets of drug treatment services. During the discussion, it was stressed that a number of solutions had been introduced to assist the drug-dependent individuals, especially switching to telehealth services. In one residential facility, outdoor services during walks or in a tent were introduced. One of the ways of preventing the spread of COVID-19 was the start of the week-on/week-off shift work, which substantially limited physical contacts between the employees (Malczewski, Jabłoński, 2020). Additionally, in some facilities, all patients and personnel started to be tested before entering the premises. In one facility, in case of a positive COVID-19 test

result among the personnel, the infected individuals still continued to work with the infected patients in a designated section of the facility separated from the rest. In order to isolate patients and keep social distance, confinement rooms were prepared in 24-hour service facilities. They were camper vans (for patients) and tents for outdoor meetings: “from April we have been admitting new patients in a new building, new patients must spend 5 days in an isolation ward” (Malczewski, Jabłoński, 2020, p. 51). Such a solution was possible if the facility had sufficient space. In the case of small facilities, no special ward for isolating purposes could be created. During the discussion, issues of COVID-19 diagnostic tests in drug treatment units were raised. Testing in treatment facilities located in small towns or villages was possible, as in such places cooperation with sanitary services was more efficient. In the case of large cities, it was impossible to finance testing with sanitary services’ funds. As a consequence, some facilities resigned from administering tests, as their own funds were insufficient (no financing by the sanitary inspectorate) (Malczewski, Jabłoński, 2020). During the meeting, an opinion was expressed that testing increased the sense of security while in the facility; however, some employees were reluctant to undergo tests as they considered them unreliable. Moreover, psychologists and therapists had direct contact with the patients, which made them vulnerable to the COVID-19 infection on a daily basis. The dire situation in drug services was manifested by the fact that 50% of clinical supervisions involved therapists not patients since it was the specialist who suffered various problems caused by the current epidemiological situation; they were exhausted, overworked and stressed out (Malczewski, Jabłoński, 2020). The arrival of an infected individual made it difficult to work and prevented new admissions. Drop-in (daily shelter for drug users) centres found it hard to operate as the patients stayed together for long, e.g. they had meals together and socialized. The number of patients dropped by approx. 30%, and this type of treatment was affected by the pandemic the hardest (Malczewski, Jabłoński, 2020). Another issue that hampered the application of telehealth was that appointments by phone were difficult to conduct because patients had little privacy at home (hard to find a quiet place to have a conversation). Most of the facilities whose representatives participated in the group discussions introduced new solutions to their daily work, mainly in the form of telehealth. During the discussion, the panellists also raised the matter of using local government funds to improve the safety of drug treatment facilities, e.g. the option of using the revenues from the alcohol license fees

to purchase disinfectant lamps or other sanitizing and protective equipment (Malczewski, Jabłoński, 2020).

3.6. COVID-19 and local initiatives

In the course of collecting data on the implementation of local drugs strategies in 2020, local governments were asked about the impact of the pandemic on their activities. The survey questionnaire is annually distributed by the KCPU under the monitoring of drug problems. In 2021, the questionnaire was completed by 2212 local governments¹ of the total number of 2477.

Changes in 2020 in local government operations compared to the year before the COVID-19 pandemic are presented in Table 1. According to the information, from 2212 local governments, 25% did not continue universal prevention programs as an effect of COVID-19 pandemic. In total, 62% of the local governments responded that there had been changes in the drug prevention operations as a result of the pandemic of 2020. The subsequent question in the KCPU survey concerned main problems and challenges that local governments had faced in 2020² following the COVID-19 pandemic, with reference to the implementation of the local drugs strategy. The local governments indicated online lessons (44.9%) as the main problem. It possibly resulted from the fact that most universal drug prevention programmes were implemented in schools. A second major problem was the limited working hours of youth centres (14.8%). It is worth noting that every tenth local government responded that failure to adapt prevention programmes to online education was a challenge during the COVID-19 pandemic, which was most likely caused by the lack of prevention programmes to be implemented online. Local governments made efforts to introduce online prevention; however, one might certainly argue that they were not full-scale operations. The results of the surveys showed that almost all local governments were affected by the COVID-19 pandemic, as it did not impact only 1.2% of the drug prevention tasks, according to the received responses. It is worth planning online prevention and education in new drugs strategies in order to ensure that such tasks are continued during the times of pandemic (Malczewski, 2022).

¹ Pl. *gmina* – this is the level of LAU-2.

² The questionnaire is annually sent by the National Centre for Prevention of Addictions (former National Bureau for Drug Prevention) in the course of the monitoring of alcohol problems. 2212 local governments completed the questionnaire in 2021.

Table 1. Changes in 2020 in local government operations compared to the year before the COVID-19 pandemic.

	Operations suspended*	Noticeable reduction	Slight reduction	No data available	Slight improvement	Noticeable improvement	Does not apply**
a) Tasks concerning information and education	20.5%	30.5%	21.1%	16.7%	1.3%	0.5%	9.5%
b) Universal prevention	25.0%	31.9%	16.6%	12.6%	0.7%	0.1%	13.2%
c) Selective and indicated prevention	19.7%	8.9%	6.2%	15.5%	0.4%	0.1%	49.1%
d) Rehabilitation and post-rehabilitation of drug-dependent individuals	11.1%	3.7%	3.6%	15.7%	0.5%	0.1%	65.4%
e) Harm reduction	12.0%	4.4%	4.0%	15.8%	0.5%	0.1%	63.2%
f) Monitoring the epidemiological situation	11.0%	5.7%	3.3%	16.0%	1.8%	3.6%	58.6%
g) Other tasks	12.2%	2.3%	1.0%	10.7%	0.2%	0.5%	73.2%

*Tasks were not completed due to the pandemic.

** Tasks were not planned for implementation under local drugs strategies in 2020.

Source: Malczewski 2022.

3.7. Black market during COVID-19 pandemic

Table 2 shows seizures revealed by the Police and Border Guard, i.e. main institutions responsible for combating drug-related crime. Due to high discrepancies in quantities of seized drugs and the considerable role of the random factor, the trend analysis is seriously hampered. A single large weight seizure might cause a considerable rise in the overall weight of seizures in a given year. In 2020 a rise in hashish, heroin, cocaine and marijuana drugs seizures were recorded. Moreover, the Police detected and dismantled 55 clandestine synthetic drug laboratories, where amphetamine was the most frequently produced narcotic drug. It was the highest figure ever (EMCDDA, 2021a).

Fig. 9 shows the analysis of results of amphetamine purity and THC content in marijuana. The analyses were conducted by the Central Forensic Laboratory of the Police. Since 2005, the average purity of amphetamine has decreased from over 50%

to 13%, and THC content in marijuana increased from 1% to 10%.

Based on the data collected in the course of the Reitox Focal Point survey from March to May 2020 (Malczewski et al. 2020), no significant developments across the country in terms of access to drugs can be observed. There were situations when some drugs were in short supply, e.g. in the city of Wrocław there was a fall in the availability of methamphetamine trafficked from Czechia following the closure of borders. In Krakow, the lack of new psychoactive substances (synthetic cathinones) was reported. Another development observed was a drop in drug prices, which is a result of the lower purchasing capacity of harm reduction clients, who were mainly injecting drug user. Moreover, the prices data from the Police (Fig. 10) does not indicate changes in availability of drugs in Poland at the beginning of the COVID-19 pandemic (EMCDDA, 2021a).

Table 2. Drug seizures in Poland (by Police or Border Guard), 2017–2020.

Drugs	2017	2018	2019	2020
Hashish (kg)	1,237.16	8,313.193	436.151	1,994.474
Marijuana (kg)	3,620.08	4,259.799	3,494.674	5,315.641
Heroin (kg)	2.49	8.839	21.464	426.9
Cocaine (kg)	81.05	277.417	2,247.828	3,886.844
Amphetamine (kg)	582.41	1,322.86	1,676.518	1,921.343
Methamphetamine (kg)	25.60	30.88	537.876	303.139
Ecstasy (tablets)	112,614	218,442	260,112	164,528
LSD (blotters)	866	3,544	1,981	1,975.7 (g)

Source: EMCDDA, 2021a.

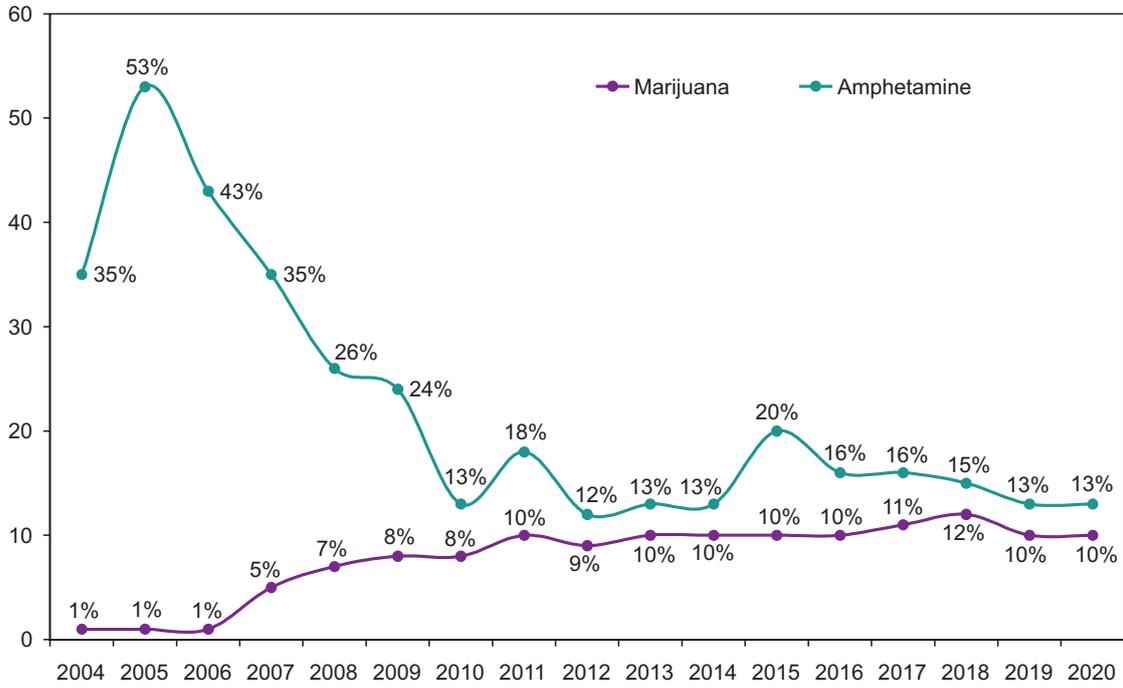


Fig. 9. Purity of marijuana (THC concentration) and amphetamine in years 2004–2020.

Source: EMCDDA, 2021a.

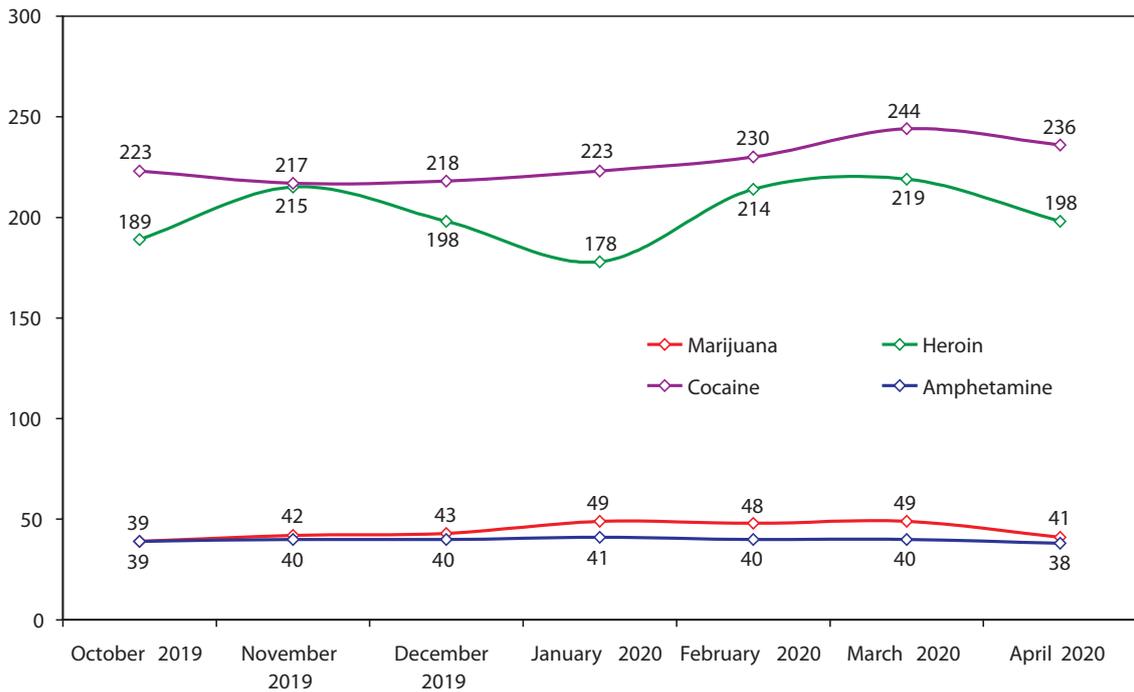


Fig. 10. Drug prices 2019–2020 (Police data) – typical price per gram (PLN).

Sources: EMCDDA, 2021a.

As part of the Web Survey 2020, which was described in the paper in section 2.4, respondents were asked whether they had difficulties in getting access to drugs. Nearly half of the respondents (46%) answered that they had no problems at all and 8% that it was very difficult for them to get drugs (Fig. 11). Respondents were also asked if there were changes

in the purity or strength of the drugs they used. With this question, nearly two-thirds (62%) replied that no changes had been made, and 12% that the purity or strength was lower (Fig. 12). To the same question about prices, a similar percentage replied that the prices had not changed 63% and 28% that they had increased (Fig. 13).

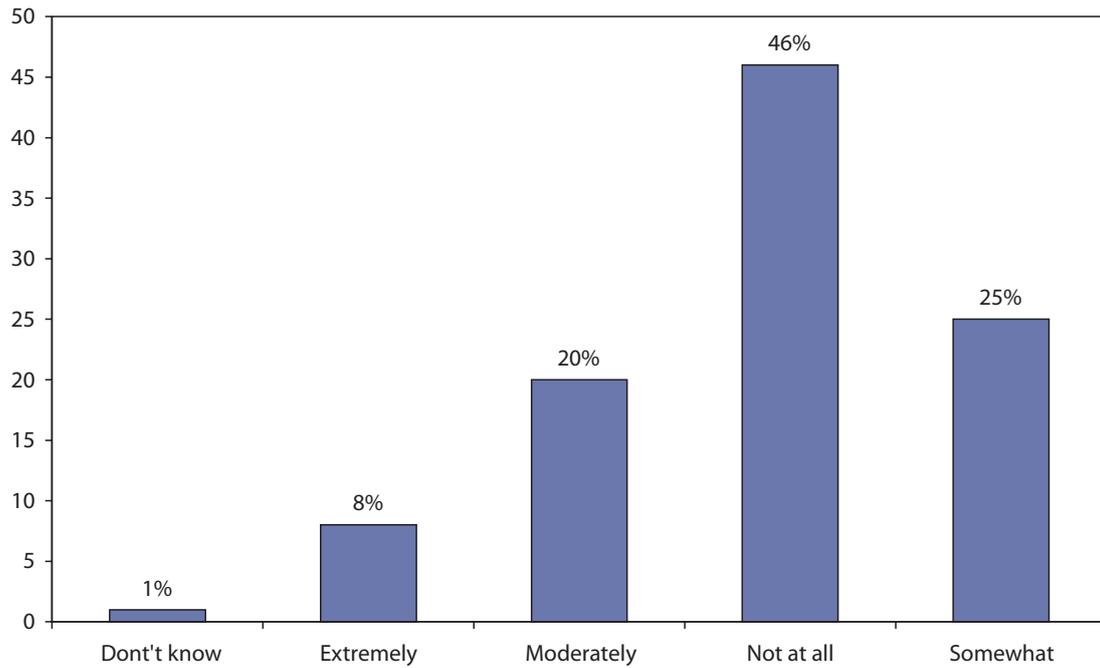


Fig. 11. Have you had difficulties in accessing illicit drugs because of COVID-19? N=298, Web Survey 2020.

Source: own calculations based on Web Survey 2020 data for Poland.

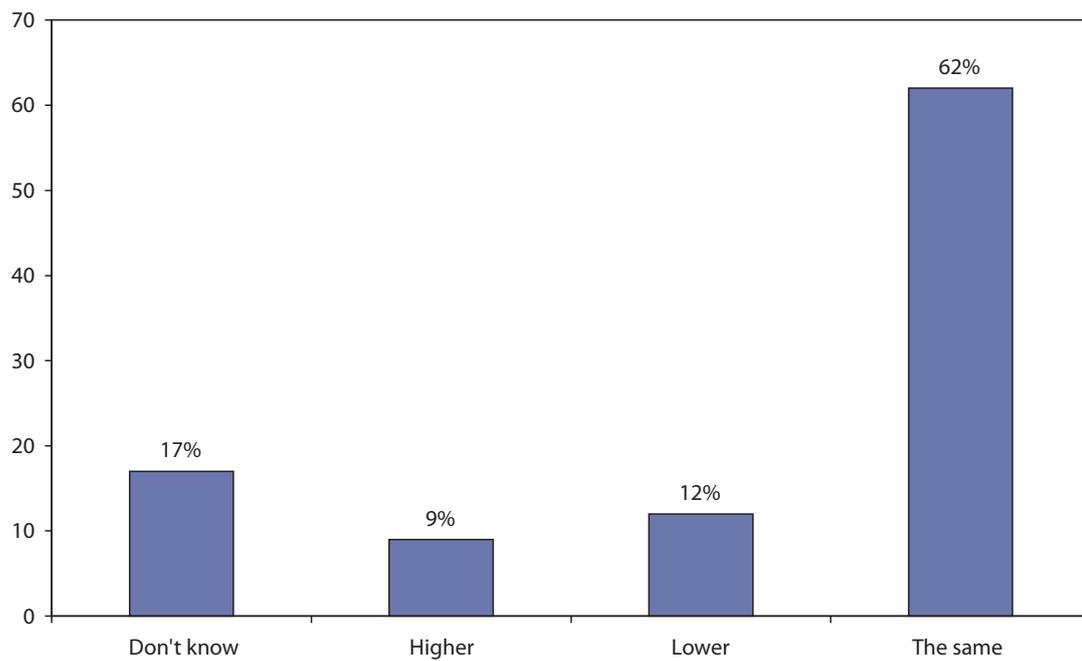


Fig. 12. Since the outbreak of COVID-19, has there been a change in the purity, price, or amount of drugs you have obtained?: purity/strength. N=297, Web Survey 2020.

Source: own calculations based on Web Survey 2020 data for Poland.

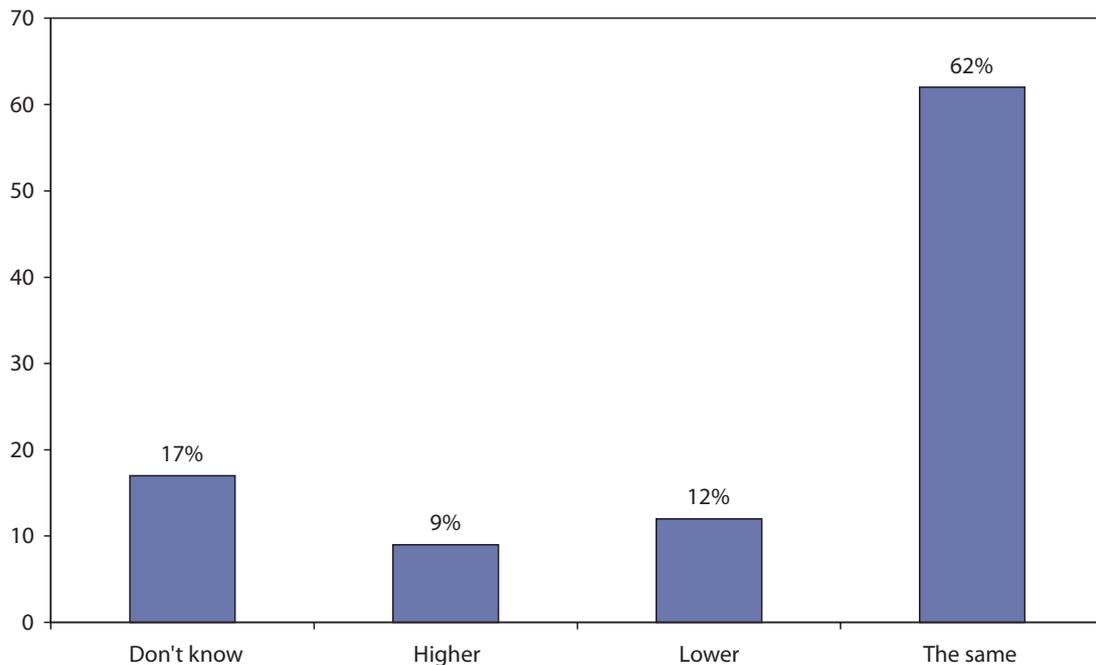


Fig. 13. Since the outbreak of COVID-19, has there been a change in the purity, price, or amount of drugs you have obtained?: prices. N=198, Web Survey 2020.

Source: own calculations based on Web Survey 2020 data for Poland.

3.8. Drug offences

In 2019, 34,341 proceedings instigated under the Drug Act were initiated, out of which 87% concerned Article 62, i.e. possession of drugs followed by cultivation crimes (Article 63: 4%) and drug trafficking (Article 59: supplying drugs with intent to gain benefit: 3%). In 2020, 34,056 proceedings instigated under the Act were initiated, out of which almost 90% concerned Article 62 i.e. possession of drugs followed by cultivation crimes (Article 63: 4%) and drug trafficking (Article 59: supplying drugs with intent to gain benefit: 3%). In 2020 there were 35,435 suspects under the Act of counteracting drugs. The highest percentage accounted for Article 62 (88%), followed by Article 59 (3%). In 2019 there were 33,831 suspects under the Act of counteracting drug. The highest percentage accounted for Article 62 (85%) followed by Article 59 (3.5%) (Polish Drug market and crime workbook, 2021). Comparing the data on drug offenses, a slight increase in the number of proceedings instigated and suspects in 2020 can be seen.

3.9. New psychoactive substances (NPS) on the drug market in Poland

When analysing the number of substances identified in laboratories in Poland, the dynamics of the development of the NPS phenomenon in years 2012–2016 is clearly visible. The number of these identifications increased from around 1,300 in 2012 to over 28,000

in 2016. Then, in years 2017–2020, this number significantly dropped. In 2020, it amounted to 3,317. The Polish market in this period was dominated by two groups of substances: synthetic cathinones and synthetic cannabinoids. While in the early years the number of identified synthetic cannabinoids and synthetic cathinones remained at a similar level, the dominance of synthetic cathinones has been systematically increasing since 2015. In 2020, they accounted for approximately 75% of all identified NPS. When analysing the dynamics of the number of samples containing synthetic cathinones and synthetic cannabinoids, it should be noted that in the case of both groups of substances, after a sharp increase in 2012–2016, there was a significant decrease. Synthetic cannabinoids in 2014 were identified in over 2,400 cases. In 2016, this number was over 7,800, and in 2018 it fell again to the level of 2014. The downward trend in this respect continued, and the number of synthetic cannabinoid samples identified in Poland dropped to 441 in 2020. A similar situation occurred in the case of synthetic cathinones, where the number of cases of identifying substances in this group in 2014 amounted to over 2,100 cases, and two years later (2016) it hit over 18,000, then dropped to around 9,800 in 2018 and 2,488 in 2020. A slightly different picture of the dynamics of this phenomenon is provided by the analysis of the weights of the seized substances, in particular cathinones (Fig. 14). In the period of 2017–2020, the weight of the

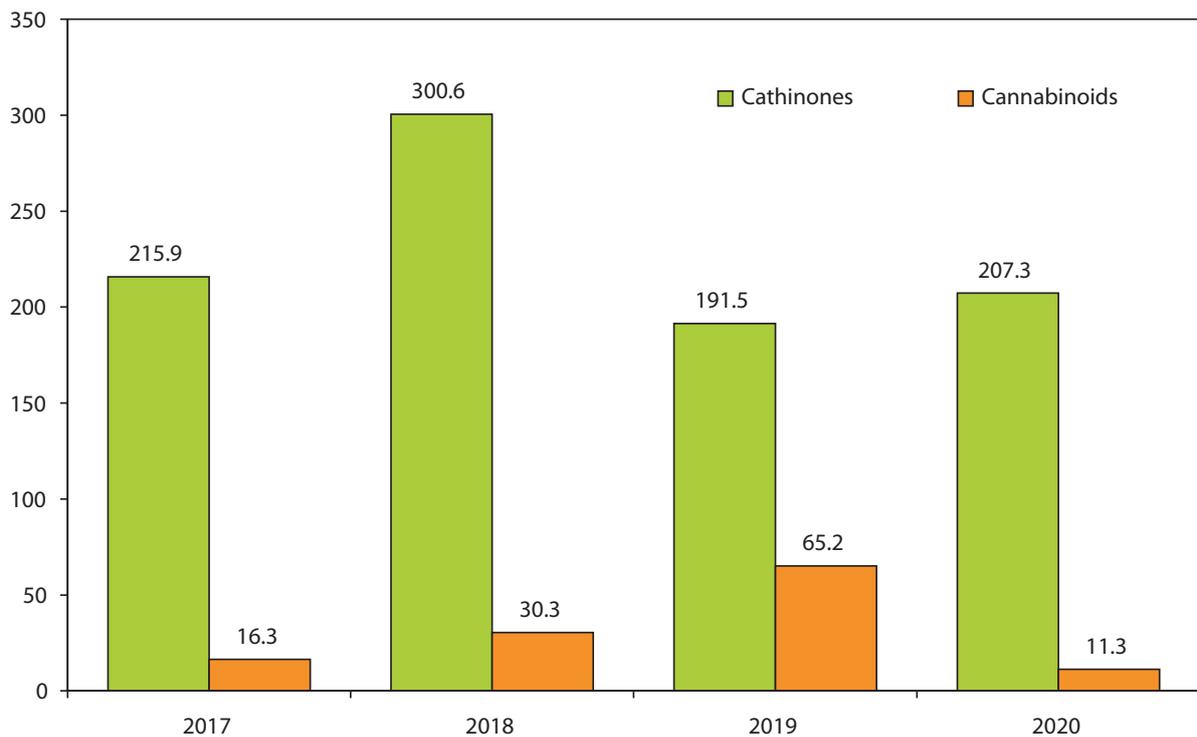


Fig. 14. Weight of seized synthetic cathinones and cannabinoids in years 2017–2020 (kg).

Source: Kidawa, 2021.

seized cathinones oscillated around 200 kg, except for 2018, when it reached 300 kg. When interpreting these data, it should be mentioned that in 2018 the law changed, and the Police received the new power to prosecute crime of manufacturing, trafficking and to some extent possession of NPS. When excluding 2018 from analyses, the data shows that when the amount of analysed cathinones significantly dropped, the weight stayed at the same or more or less the same level.

Moreover, there are indications that substances from this group are increasingly more often produced in the territory of the Republic of Poland. This conclusion is prompted by the fact that since 2019 the number of illegal cathinone-producing laboratories in Poland identified by the police has significantly increased (Perkowska, 2021), and there have been several individual cases of seizures concerning a significant volume. The latter would explain the downward trend in the number of samples analysed and, at the same time, the relatively constant values for the weights of the seized cathinones.

In addition, when analysing particular substances, it should be noted that most of the substances that dominate the market are currently on the lists of controlled substances. There are signs that substances that were banned many years ago are returning to the market. One such example is mephedrone, which practically disappeared from the market after being banned in 2010, but has started

to appear again for several years. In 2016–2018, the weight of seized mephedrone was approx. 2–3 kg, in 2019 it dropped to approx. 0.6 kg, while in 2020 it was already 9 kg.

The information presented above may suggest that the NPS market in Poland is becoming more and more similar to the traditional drug market, and organized criminal groups are increasingly involved in their production and sale.

In addition to the synthetic cathinones and synthetic cannabinoids discussed above, there are two more groups of substances important for the analysis of the NPS market. These are new benzodiazepines and synthetic opioids. Substances from both of these groups are much less common; however, due to their mechanism of action, they may pose a significant threat to public health. Often, substances from these groups have a much stronger effect on human body and are active in smaller doses than their predecessors. When analysing the trends of their occurrence, it should be noted that they had completely different dynamics compared to the synthetic cathinones and synthetic cannabinoids. Substances from these two groups (Fig. 15) practically did not exist on the market before 2014. Benzodiazepines appeared around 2015 and the number of their identifications in laboratories was increasing steadily, reaching over 500 cases in 2017 and 2018. Synthetic opioids appeared later, and in years 2017–2018 their number hovered around over 150 cases. However, in both of

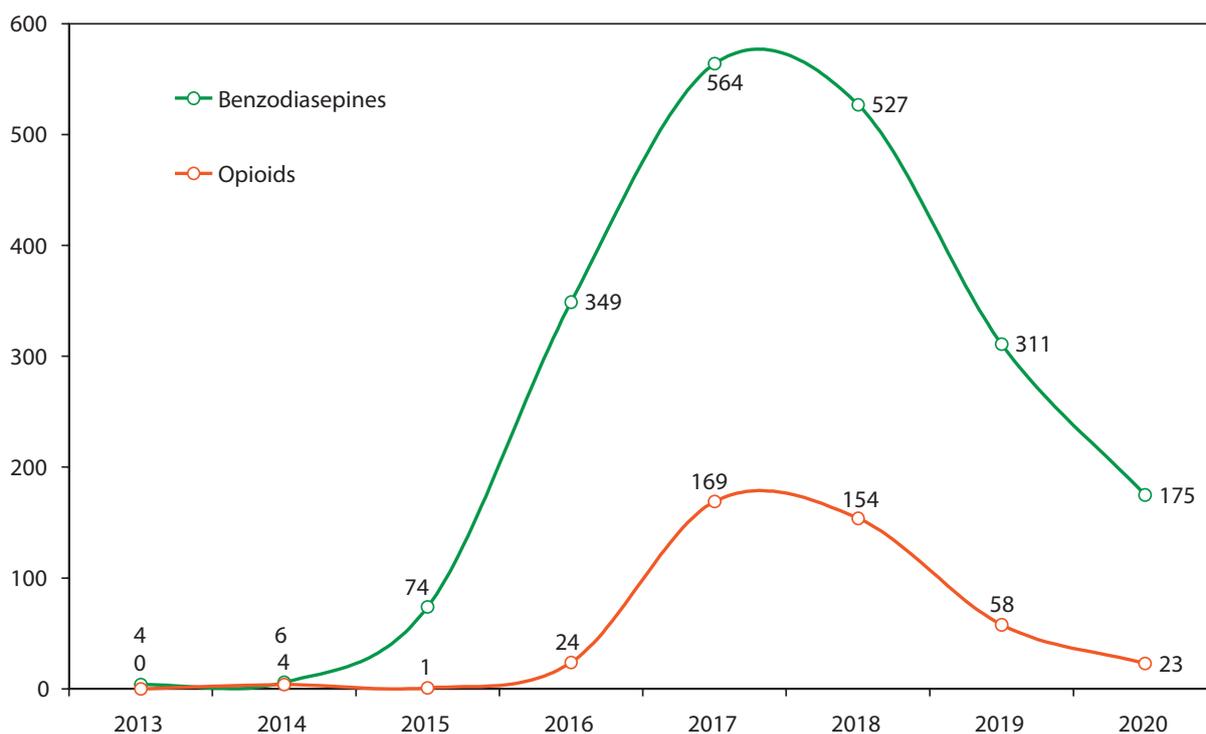


Fig. 15. Number of NPS identifications broken down by benzodiazepines and opioids in years 2013–2020.

Source: Kidawa, 2021.

these groups of substances, in 2019 and 2020, significant decreases were recorded.

4. Conclusions

The years 2020 and 2021 were dominated in Poland by the COVID-19 pandemic, which badly affected the drug services and prevention activities, especially at the beginning of the year. The drug services predominantly focused on ensuring the availability of services in the new circumstances and tried not to limit new admissions. Residential and drop-in centres reduced their operations most radically but ambulatory facilities also needed to wind down their operations. As a result of the pandemic, drug treatment units, mainly counselling centres, were forced to considerably transform their operations by means of telehealth solutions. It can be clearly seen that in the first half of the year the pandemic contributed to the significant reduction of new treatment admissions. The OST programme dispensed substitute drugs for longer periods. In the case of harm reduction activities, we could also observe limitations caused by the pandemic restrictions in the first half of 2020. Harm reduction programme developed new forms of outreach, such as distribution of food or protective equipment. The whole outreach system, including drug services, was confronted with the lack of previously prepared procedures in

relation to the COVID-19 pandemic. However, in response to the pandemic, 83% of the drug services surveyed by the KCPU in the first half of 2020 introduced telehealth drug treatment or harm reduction services (e.g. phone calls, video calls, online access) (Malczewski, 2020). Consequently, the drug treatment system could be supplemented by new forms of patient work. It is also worth noting that following the response to the COVID-19 pandemic, drug-dependent individuals, especially the homeless, suffered most. The analyses presented in the article do not show an increase in the use of psychoactive substances during the pandemic; moreover, it is possible to indicate a decrease in the consumption of alcoholic beverages in 2020.

The recommendation of the research carried out by NIZP PZH-PIB was to intensify the COVID-19 vaccine rollout in the population of psychoactive substance users in order to reduce the risk of severe complications (Zakrzewska, Rosińska, 2022).

The analysis of the drug market during the pandemic COVID-19 did not show a fall in the availability of drugs at the national level. The prices data from the Police (EMCDDA, 2021a) does not indicate changes in the availability of drug in Poland at the beginning of the COVID-19 pandemic, and the amount of seized drugs did not drop in 2020 (EMCDDA, 2021a).

In regard to NPS, it seems that the phenomenon of NPS has been limited, and law enforcement

agencies, along with the 2018 Drug Law amendment, received tools that allowed them to counteract this phenomenon more efficiently. These tools are being used more and more efficiently. The phenomenon of new substances itself is becoming similar to the traditional illicit drug market. However, the level of threat to users from the above-mentioned substances has not changed much. New substances are still appearing which, through their mechanism of action, can cause poisoning and death on a larger scale. We may draw the conclusion that one should not count on the fact that new psychoactive substances will completely disappear from the market. It is more likely that they will permanently take their place in the illegal drug market. It seems that the COVID-19 pandemic did not have a large impact on the availability and use of NPS, although in some cities, such as in Krakow, there were problems with access to NPS. As a result, users began using injectable amphetamines in place of the synthetic cathinone.

References

- Ahrens K.F., Neumann R.J., Kollmann B., Brokelmann J., von Werthern N.M., Malyschau A., Weichert D., Lutz B., Fiebach C.J., Wessa M., Kalisch R., Plichta M.M., Lieb K., Tüscher O., Reif A., 2021, Impact of COVID-19 lockdown on mental health in Germany: longitudinal observation of different mental health trajectories and protective factors, *Translational Psychiatry*, 11, 392. doi: 10.1038/s41398-021-01508-2
- Chawla N., Tom A., Sen M.S., Sagar R., 2021, Psychological Impact of COVID-19 on Children and Adolescents: A Systematic Review, *Indian Journal of Psychological Medicine*, 43(4), 294–299. doi: 10.1177/02537176211021789
- Chodkiewicz J., 2020, *Raport z pierwszej części badań: ŻYCIE W DOBIE PANDEMII* (Eng. Patterns of alcohol consumption in Poland 2020 Questionnaire Survey Report), Zakład Psychologii Klinicznej i Psychopatologii Instytut Psychologii Uniwersytet Łódzki, Łódź.
- Dalmata M., 2021, *Wyniki badania klientów programów wymiany igieł i strzykawek – prezentacja z konferencji programów redukcji szkód w Warszawie* (Eng. Results of the customer survey of needle and syringe exchange programs – presentation from the harm reduction programs conference in Warsaw).
- EMCDDA, 2020, *European Drug Report 2020: Trends and Developments*, 2020, https://www.emcdda.europa.eu/publications/edr/trends-developments/2020_en (accessed 18 January 2022).
- EMCDDA, 2021a, *Polish Drug market and crime workbook*, 2021, https://reitox.emcdda.europa.eu/attachements.cfm/att_279327_EN_PL_Drug%20markets%20crime%202021%20Artur_final.docx (accessed 26 January 2022).
- EMCDDA, 2021b, *Polish Harms and harm reduction workbook*, [https://reitox.emcdda.europa.eu/attachements.cfm/att_278116_EN_PL_Harms%20and%20harm%20reduction_2021%20\(1\).docx](https://reitox.emcdda.europa.eu/attachements.cfm/att_278116_EN_PL_Harms%20and%20harm%20reduction_2021%20(1).docx) (accessed 25 January 2022).
- Fundacja CBOS i Krajowe Centrum Przeciwdziałania Uzależnieniom, 2022, *Młodość 2018* (Eng. Youth 2018), Warszawa.
- Heckathorn D.D., 1997, Respondent-Driven Sampling: A New Approach to the Study of Hidden Populations, *Social Problems*, 44(2), 174–199. doi: 10.2307/3096941.
- Hibszter A., Tracz M., 2021, The impact of COVID-19 on education in Poland: Challenges related to distance learning, *Geographia Polonica*, 94(3), 397–411. doi: 10.7163/GPol.0211
- Instytut Zdrowia Publicznego PZH - Państwowy Instytut Badawczy, 2021, *Ogólnopolskie Badanie Seroepidemiologiczne COVID-19: OBSER-CO Raport z I tury badania* (Eng. National Seroepidemiological Study COVID-19: OBSER-CO Report on the first round of the study), <https://www.pzh.gov.pl/projekty-i-programy/obserco/raporty/> (accessed 5 January 2022).
- Kęsierska-Koszałka J., 2021, Psychologiczne konsekwencje pandemii COVID-19 (Eng. Psychological consequences of pandemic COVID-19), [in:] W. Nowak, K. Szalotka (eds.), *Zdrowie i style życia. Ekonomiczne, społeczne i zdrowotne skutki pandemii* (Eng. Health and lifestyle. Economic, social and health effects of the pandemic), Wydział Prawa, Administracji i Ekonomii Uniwersytetu Wrocławskiego, Wrocław, 47–57. doi: 10.34616/142078
- Kidawa M., 2021, Zjawisko nowych substancji psychoaktywnych w świetle aktualnych danych (Eng. The phenomenon of new psychoactive substances in the light of current data), *Serwis Informacyjny UZALEŻNIENIA*, 2(94), 29–35.
- Lindqvist K., Wallmofeldt C., Holmén E., Hammarberg A., Käberg M., 2021, Health literacy and changes in pattern of drug use among participants at the Stockholm Needle Exchange Program during the COVID-19 pandemic, *Harm Reduction Journal*, 18(1), 52. doi: 10.1186/s12954-021-00499-z
- Malczewski A., 2022, Przeciwdziałanie narkomanii na poziomie lokalnym – nowe rozwiązania na nowe czasy (Eng. Counteracting drug addiction at the local level – new solutions for new times, *Świat Problemów*, 3/2022, 12–14.
- Malczewski A., Jabłoński P. 2020, *Raport o stanie narkomanii 2020* (Eng. National Drug Report 2020), Krajowe Biuro ds. Przeciwdziałania Narkomanii, Warszawa, https://www.cinn.gov.pl/portal?id=15&res_id=1837081 (accessed 5 February 2022).
- Malczewski A., Kidawa M., Bezv M., 2020, *The impact of the COVID-19 epidemic on drug services, drug users and drug market in Poland – findings of the rapid situation assessment*, Krajowe Biuro ds. Przeciwdziałania Narkomanii, Warszawa, https://www.researchgate.net/publication/341510065_The_impact_of_the_COVID-19_epidemic_on_drug_services_drug_users_and_drug_market_in_Poland_findings_of_the_rapid_situation_assessment/stats (accessed 20 January 2022).
- PARPA, 2022, *dane statystyczne* (Eng. statistic data), <https://www.parpa.pl/index.php/badania-i-informacje-statystyczne/statystyki> (accessed 25 January 2022).

- Perkowska I., 2021, *Update from Europol*, 21st Annual meeting of the Reitox Early Warning System Network, June 22–23 2021, Lisbon.
- Rowicka M., Postek S., Zin-Sędek M., 2021, *Wzory konsumpcji alkoholu w Polsce – Raport z badań kwestionariuszowych 2020 r.* (Eng. Patterns of alcohol consumption in Poland – Report on the questionnaire research 2020), Państwowa Agencja Rozwiązywania Problemów Alkoholowych, Warszawa, https://www.parpa.pl/images/wzorykonsumpcji_2020.pdf (accessed 25 January 2022).
- Sagan A., Bryndova L., Kowalska-Bobko I., Smatana M., Spranger A., Szerences V., Webb E., Gaal P., 2021, A reversal of fortune: Comparison of health system responses to COVID-19 in the Visegrad group during the early phases of the pandemic, *Health Policy*, in press. doi: 10.1016/j.healthpol.2021.10.009
- Saladino V., Algeri D., Auriemma V., 2020, The Psychological and Social Impact of Covid-19: New Perspectives of Well-Being, *Frontiers of Psychology*, 11, 577684. doi: 10.3389/fpsyg.2020.577684
- Stępień J., Michalski T., Grabowski J., Waszak P., Grabkowska M., Macul A., Rojek J., 2021, Social response and spatial mobility change due to COVID-19 pandemic in Poland, *Geographia Polonica*, 94(3), 381–396. doi: 10.7163/GPol.0210
- Web Survey 2020 data for Poland* – own calculation-based database from on-line survey, Krajowe Centrum Przeciwdziałania Uzależnieniom, Warszawa.
- Zakrzewska K., Rosińska M., 2022, *PWIDhealth, Stan zdrowia osób przyjmujących iniekcyjnie substancje w zakresie chorób zakaźnych* (Eng. PWIDhealth, Health status of people who inject substances in the field of infectious diseases – final report), Instytutu Zdrowia Publicznego PZH – Państwowy Instytut Badawczy, Warszawa.