



# COVID-19 PANDEMIC IN SLOVENIA

Results of a panel online survey on the impact of the pandemic on life (SI-PANDA), 12th wave

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## **CONTENTS**

INTRODUCTION	4
SUMMARY OF THE SURVEY	6
MAIN RESULTS	7
Complying with current measures	7
Supporting the measures currently in force	10
Supporting the possible measures	12
Trust in persons and institutions to manage the pandemic adequately	13
Vaccination	15
Voluntary free self-testing	25
The impact of the pandemic on lifestyle and bad condition	27
Contact with the healthcare system	30
The impact of the pandemic on the financial situation	32
Problems after SARS-CoV-2 virus infection recovery – post-COVID syndrome or long COVID	33
Highlighted topic of the 12th wave of the survey: Risky behaviours	36

#### INTRODUCTION

Pandemic fatigue is the expected and natural human response to long-lasting public health crisis that significantly affects the daily life of an individual. It appears gradually and is influenced by emotions, experience, and attitudes. It is a response to long-lasting and unsolved distress in people's lives. The severity and the scope of COVID-19 pandemic and the introduction of strict measures to prevent and limit the transmission of the infection have a huge impact on the daily lives of all people, including those not directly affected by the virus. Over time, people's compensatory mechanisms for crisis management become fatigued and so these people lack motivation to follow recommended self-protective behaviours, and consequently jeopardize the effectiveness of measures to prevent the spread of SARS-CoV-2 infection among the population.

Understanding COVID-19-related human behaviour enables the identification of atrisk target groups and contributes to finding solutions that encourage better adherence to protective behaviour recommendations. Adherence to measures most effectively reduces the transmission and spread of SARS-CoV-2 in the long run, reduces fatigue and distress of all kinds, and increases the quality of life. In addition, it maintains a functioning healthcare system, enables the normalization of health promotional, preventive, and curative treatments, normalizes the functioning of all segments of society, from education to economy, and enables reducing inequalities through remote determinants of health. Above all, it can most effectively reduce the COVID-19 burden at the individual and social level in Slovenia.

The aim of the research is to investigate and understand human behaviour in relation to COVID-19 and to assess pandemic fatigue during and after the COVID-19 pandemic in Slovenia. With the help of this research, we hope to identify and address the impact of the pandemic, the measures introduced, and the recommendations and decisions made by the government on people's lives. Here are some key results. The data collected in the survey provide key information on pandemic fatigue of the general population for professionals and decision makers. This also enforces the recommendation of the World Health Organization<sup>1</sup>, that countries regularly conduct qualitative and quantitative population surveys, which should serve as the basis for further action.

https://apps.who.int/iris/bitstream/handle/10665/335820/WHO-EURO-2020-1160-40906-55390-eng.pdf

#### **METHODOLOGY**

The survey in the form of an online questionnaire is conducted in twelve waves (repetitions once every two weeks) starting on 4 December 2020. The survey is conducted on behalf of the National Institute of Public Health (NIJZ) by the Mediana Institute for Market and Media Research, while the data are analysed by NIJZ.

Every two weeks, selected panel members are invited to take part in an online survey conducted through Mediana's web panel. Each wave of online survey involves a sample of about 1,000 adults aged 18 to 74 who are included in Mediana's web panel.

In the survey, we use the World Health Organization (WHO)<sup>2</sup> questionnaire, which was translated, and adjusted to the situation in our country in accordance with the WHO instructions.

The report mostly presents data from the 12<sup>th</sup> wave of the panel web survey, that took place from 7 May 2021 to 9 May 2021 on a sample of 1,011 adults aged 18 to 74 years. Some comparisons with previous waves of survey are also shown.

Do sedaj so bili izvedeni naslednji valovi raziskave:

1st wave: from 4 Dec 2020 to 6 Dec 2020

2<sup>nd</sup> wave: from 18 Dec 2020 to 21 Dec 2020

3rd wave: from 4 Jan 2021 to 5 Jan 2021

4th wave: from 15 Jan 2021 to 17 Jan 2021

5th wave: from 29 Jan 2021 to 30 Jan 2021

6th wave: from 12 Feb 2021 to 15 Feb 2021

7th wave: from 26 Feb 2021 to 1 Mar 2021

8th wave: from 12 Mar 2021 to 15 Mar 2021

9th wave: from 26 Mar 2021 to 29 Mar 2021

10<sup>th</sup> wave: from 9 Apr 2021 to 12 Apr 2021

11th wave: from 23 Apr 2021 to 26 Apr 2021

12th wave: from 7 May 2021 to 9 May 2021

<sup>&</sup>lt;sup>2</sup> https://www.euro.who.int/en/health-topics/health-determinants/behavioural-and-cultural-insights-for-health/tools-and-resources/who-tool-for-behavioural-insights-on-covid-19/survey-tool-and-guidance-behavioural-insights-on-covid-19-produced-by-the-who-european-region.

## **SUMMARY OF THE SURVEY**



	Indicator	1st wave 46.12.2020 (%)	12 <sup>th</sup> wave 79.5.2021 (%)
	Use of the protective mask in public (the share of respondents who have complied with the measure in the last 7 days)	95.7	86.8
	Maintaining recommended interpersonal distance in public (the share of respondents who have complied with the measure in the last 7 days)	90.7	79.8
	Hand disinfection when washing is not possible (the share of respondents who have complied with the measure in the last 7 days)	90.6	82.8
îîî	Avoiding a private social event (the share of respondents who have complied with the measure in the last 7 days)	87.4	67.9
	Testing in case of close contact with a person who tested positive for COVID-19  (the share of respondents who would definitively get tested in case they were in contact with someone who tested positive for COVID-19 and would not develop any symptoms themselves)	64.4	69.7
Cost 6-17 Cosphri	Intention to get vaccinated against COVID-19  (the share of respondents who will get vaccinated against COVID-19, when it is their turn to get vaccinated)	51.1	59.1
	Avoiding a visit to the doctor due to a problem not related to COVID-19 (the share of respondents who avoided a visit to the doctor in the last 2 weeks due to a non-COVID-19 problem)	35.8	25.2
	Mental health problems (the share of respondents with depressive disorder or mental health problems)	37.5	26.7
	Deterioration of the personal financial situation (the share of respondents who estimated that their financial situation in the last 3 months was worse than before)	31.4	20.9

#### **MAIN RESULTS**

#### **Complying with current measures**

Most respondents stated that they had complied with the prescribed measures and recommendations to prevent the transmission of SARS-CoV-2 virus in the last 7 days (Figure 1).

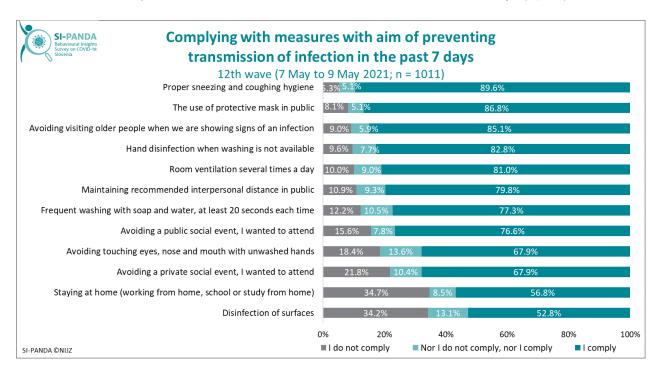


Figure 1: Complying with measures wit aim of preventing infection in the last 7 days, total.

Of listed measures, respondents mostly comply with proper sneezing and coughing hygiene and (89.6%), and the least with disinfection of surfaces (52.8%). Complying with the measure of staying at home, which includes working from home, school or study from home, has fell slightly again in this wave of the survey (for 2.5 percentage points compared to 11<sup>th</sup> wave), which is expected given the improvement of the epidemiological picture and release of measures.

If we compare the results of individual survey waves, the use of a protective mask in public was the most considered measure up to the 9<sup>th</sup> wave of the survey (Figure 2), while in the 10<sup>th</sup> and 11<sup>th</sup> waves of the survey the percentage of using a protective mask in public fell to such an extent that proper sneezing and coughing hygiene became the most considered measure. In addition to the use of a protective mask in public and staying at home, the 12<sup>th</sup> wave of the survey shows a decrease in compliance with some other measures, namely a decrease in avoiding visiting older people when we are showing signs of an infection (by 2.7 percentage points), decrease in hand disinfection when washing is not available (by 2.7 percentage points), and a decrease in the avoidance of private social events (by 1.4 percentage points). Compared to the beginning of the survey, the largest decline in the compliance occurred with the measure of avoiding a private social event, namely by 19.5 percentage points compared to the first wave. Despite the declining share of people who have complied with the measures in the last 7 days, the share of people who

would definitively get tested if they were in contact with COVID-19 positive person remains stable throughout individual waves. This proportion equals 69.7% in the 12<sup>th</sup> wave and is 5.3 percentage point higher compared to the first wave of the survey. The decline in the share of people who follow the measures is probably due to the gradual release of measures, as well as the increase in the number of people who have recovered from COVID-19 or were vaccinated against it.

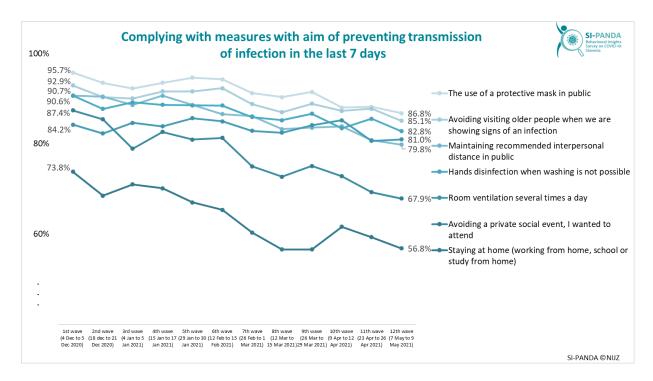


Figure 2: Complying with some measures wit aim of preventing infection in the last 7 days total, by survey waves.

We also asked the respondents where they had been working in the last 7 days. 45.2 percent of persons answered they went to work all the time because their work could not be done from home. As many as 13.4 percent of respondents worked from home during this entire time (Figure 3).

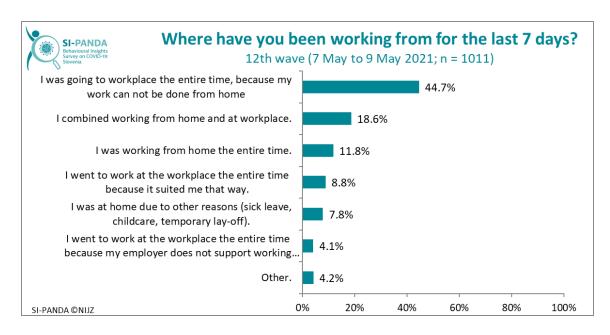


Figure 3: The location of performing work during the last 7 days, total.

If we compare several waves of the survey<sup>3</sup>, the share of people who worked from home in the last 7 days has been declining since the 2<sup>nd</sup> wave of survey, except for the 10<sup>th</sup> wave of survey, in which it increased slightly again due to temporary lockdown. In this wave, the share of people who combined working from home and working at workplace increased (Figure 4).

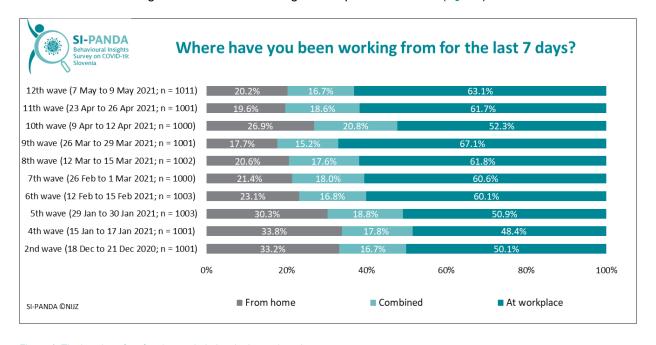


Figure 4: The location of performing work during the last 7 days, by survey waves.

<sup>&</sup>lt;sup>3</sup> The question of the location of performing work was included for the first time in the 2<sup>nd</sup> wave of the survey. This issue was not included in the 3<sup>rd</sup> wave of the survey due to the ongoing Christmas and New Year holidays.

#### Supporting the measures currently in force

Measures to prevent and limit the spread of SARS-CoV-2 virus are very diverse, varying slightly between individual waves of survey, and have received very different support. During the previous wave of the survey, measures were released in the field of service and catering activities in accordance with the COVID-19 Pandemic Relief Plan of 9 April 2021 (from 24 April 2021), and from 26 April 2021 under certain conditions, higher education institutions and student dormitories were also opened. During the 12<sup>th</sup> wave of the survey, vaccination in Slovenia became possible for all adults under the age of 50, so in connection with current measures, we asked, among other things, about the support for this option. Support for all measures was considerable, respondents were the least supportive of regional easing or tightening of measures according to the epidemiological picture (55.7%), and the most of free movement across statistical regions – the latter was supported by 86.9% of the respondents. The possibility of vaccination for all adults under the age of 50 was supported by 77.7% of respondents (Figure 5).

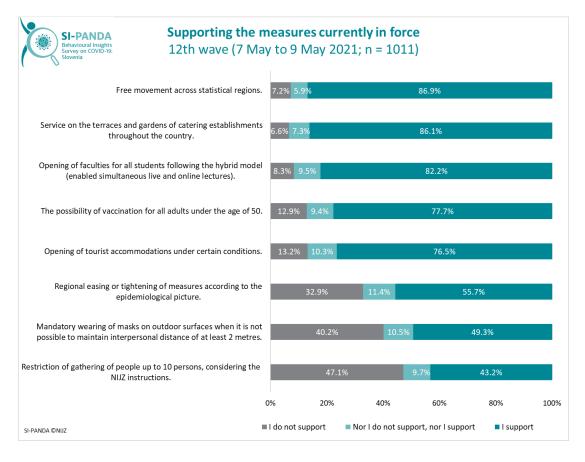


Figure 5: Supporting the measures currently in force, total.

Among the measures that were in force for a longer period (already at the time of the survey for the 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> waves), in the 12<sup>th</sup> wave, the respondents supported the regional release or tightening of measures according to the epidemiological picture (55.7%), which in this wave had higher support than wearing masks in open public places or spaces, which was otherwise the most supported measures throughout all the other waves. Restriction of gathering of people up to 10 persons, considering the NIJZ instructions, was supported by 43.2% of respondents in the 12<sup>th</sup> wave.

Throughout the survey, the respondents were also asked whether they find the restrictions currently in force as exaggerated. In the  $10^{th}$  wave – in time of temporary lockdown – 64.3% of respondents answered affirmative, which was the highest share so far (Figure 6), in the  $12^{th}$  wave, however, the share of persons with such opinion fell again (54.5%), which is understandable given the additional release of measures and more favourable epidemiological situation.

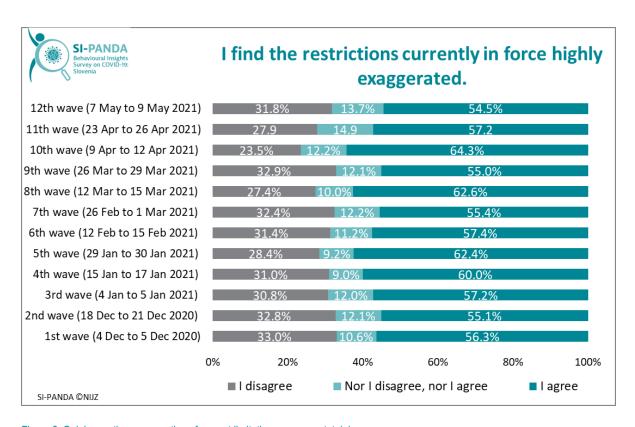


Figure 6: Opinion on the exaggeration of current limitation measures, total, by survey waves.

#### **Supporting the possible measures**

In the period before the 12<sup>th</sup> wave of the survey, there was a lot of talk about opening theatres and cinemas under certain conditions and about the possibilities of organizing public and private events under certain conditions, so we asked the respondents about their opinion on this. Almost 80 percent of respondents expressed support for the opening of theatres and cinemas under certain conditions (77.1%). Also, 75.9% of respondents supported the possibility of organizing public events for more than 10 people under certain conditions and were slightly less supportive about the possibility of organizing private events for more than 10 people under certain conditions (69.7%) (Figure 7).

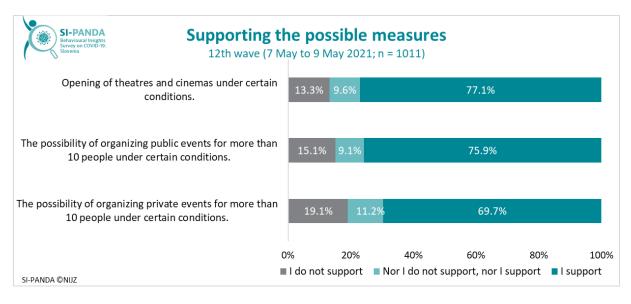


Figure 7: Supporting the possible measures, total.

# Trust in persons and institutions to manage the pandemic adequately

Throughout the survey waves, respondents trust their personal physicians the most in terms of proper pandemic management – the average confidence on the 7-point scale in the 12<sup>th</sup> wave is 5.5. This is followed by trust in hospitals with an average of 5.0 and trust in employers with an average of 4.6 (Figure 8). People who have already been vaccinated or are planning to be vaccinated have more confidence in all of the above institutions than those who will not be vaccinated.

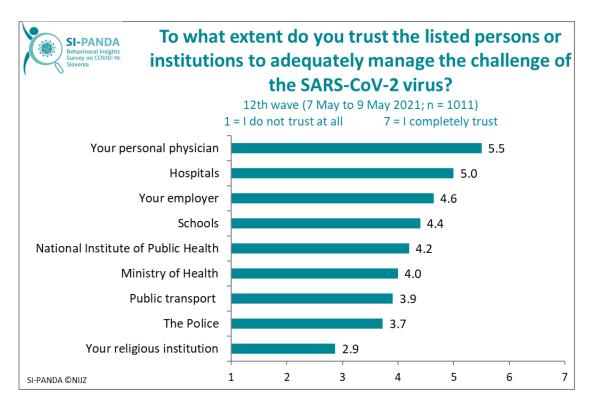


Figure 8: Trust in persons and institutions to manage the pandemic adequately, total.

Throughout the survey, respondents were also asked how difficult or easy it is for them to assess whether the information about the SARS-CoV-2 virus in the media is reliable. The percentage of people who think that such an assessment is easy or very easy to make has increased somewhat, namely by 3.4 percentage points compared to 11<sup>th</sup> wave of the survey (Figure 9), however, 44.5% of persons still feel that it is difficult or very difficult to assess whether the information about the SARS-CoV-2 virus in media is reliable. This indicates that people's trust in the media is relatively weak and poses many challenges for improving communication in this area.

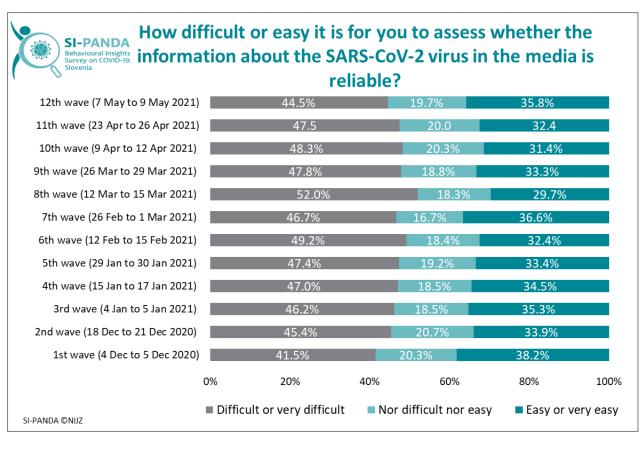


Figure 9: The difficulty to assess the reliability of information about the SARS-CoV-2 virus in the media, total and by survey waves.

#### **Vaccination**

In the 12<sup>th</sup> wave, two thirds (66.7%) of respondents believe that the COVID-19 vaccine can help curb the spread of SARS-CoV-2. Throughout the survey waves, younger people are more sceptical about the vaccine compared to older people, but in this wave in the 18-29 age group, the percentage of those who agree with this statement has increased by as much as 16 percentage points compared to the previous wave of the survey (Figure 10).

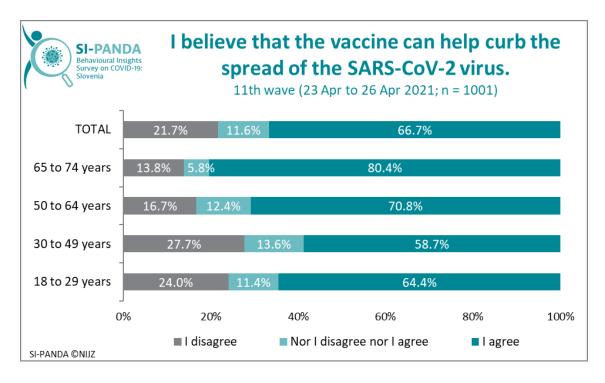


Figure 10: Opinion on whether the vaccine can help curb the spread of SARS-CoV-2 virus, total and by age groups.

If we compare different waves of the survey, the share of people who believe that the vaccine against COVID-19 can help curb the spread of SARS-CoV-2 virus has risen slightly again after declining in the 11<sup>th</sup> wave and currently stands at 66.7% (Figure 11).

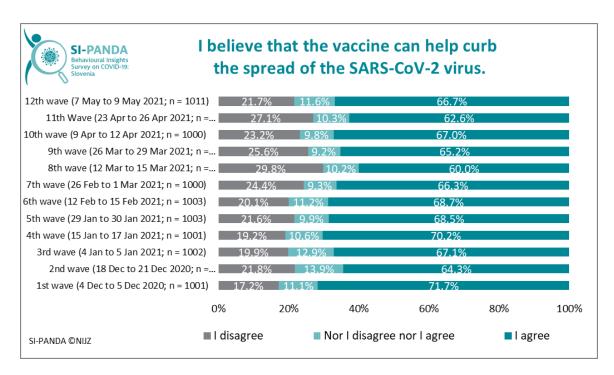


Figure 11: Opinion on whether the vaccine can help curb the spread of SARS-CoV-2, total, by survey waves.

Almost 60 percent of the respondents intend to be vaccinated against COVID-19 once the vaccine is available to them. The intention to vaccinate was the highest in this wave of the survey (Figure 12). The decline in intention to get vaccinated in the 8<sup>th</sup> wave of the survey could be attributed to the suspension of vaccination with AstraZeneca vaccine between 15 and 18 March 2021, which received a lot of media attention. After the positive opinion of the European Medicines Agency (EMA) on the safety of this vaccine, there is renewed intention to get vaccinated. If we only consider persons who have not yet been vaccinated against COVID-19, 43.7% of them report the intention to be vaccinated in the 12<sup>th</sup> wave.

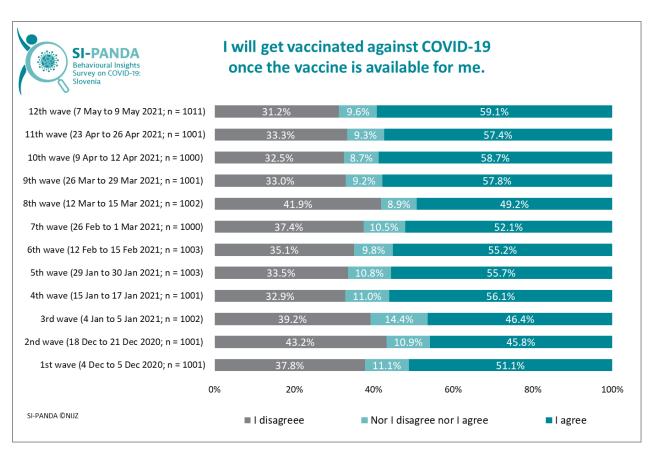


Figure 12: Intention to get vaccinated against COVID-19, total, by survey waves.

The intention to get vaccinated increases with age (Figure 13). As expected, it is the highest in the age group 65 to 74, where approximately three quarters of respondents (77.0%) are determined to be vaccinated. More men (61.1%) than women (57.0%) intend to get vaccinated. Among people with chronic diseases, 68.3% intend to get vaccinated.

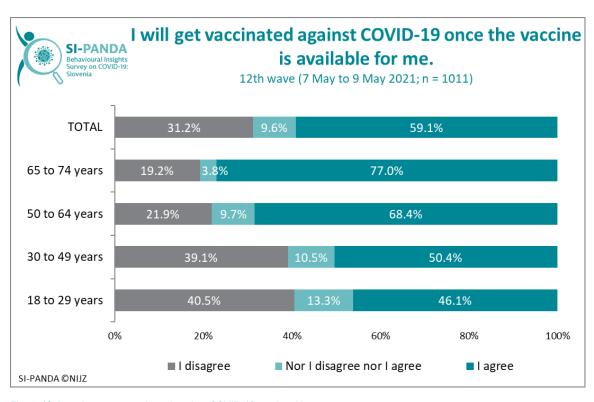


Figure 13: Intention to get vaccinated against COVID-19, total and by age groups.

Data from the 12<sup>th</sup> wave of the survey show that 30.1% of respondents have already been vaccinated, namely 10.1% of people have already received two doses of vaccine and 20.0% one dose of COVID-19 vaccine. The share of vaccinated persons (with one or two doses of COVID-19 vaccine) among the oldest age group of respondents (aged 65 to 74 years) is already 70.1% (Figure 14). Just under two-fifths (36.3%) of respondents did not get vaccinated so far because the vaccine was not yet available for them, and a little less than a third (28.6%) of respondents does not intend to get vaccinated. The share of those who do not intend to get vaccinated is the highest age group 30-49 years (36.9%). Women (31.2%) are less in favour of vaccination than men (26.2%)

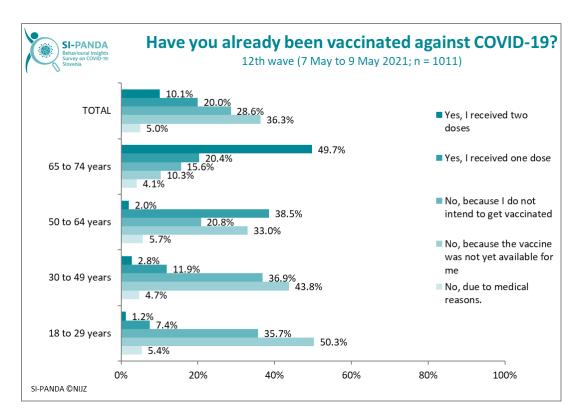


Figure 14: Vaccination against COVID-19, total and by age groups.

The share of those who will not be vaccinated is much higher among women (36.9%) compared to men (30.4%) (Figure 15), and in terms of living environment it is the highest among those living in rural areas (34.7%).

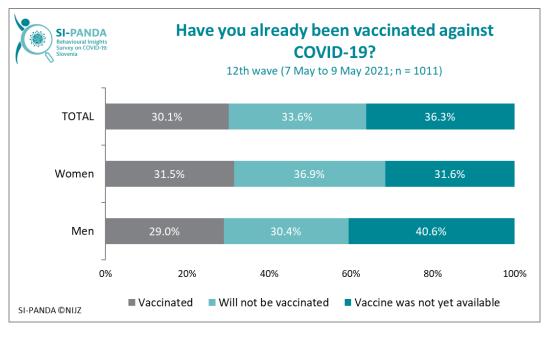


Figure 15: Vaccination against COVID-19, total any by gender 4.

<sup>&</sup>lt;sup>4</sup> Non-vaccination for health reasons is also included in the "will not be vaccinated" category.

If we compare the respondetns who have already recovered from COVID-19 with those who have not yet, the share of those who will not be vaccinated is, as expected, higher among those who have already recovered from the disease (50.5% among those who have already recovered from the disease compared to 29.2% among persons who have not yet recovered from the disease) (Figure 16).

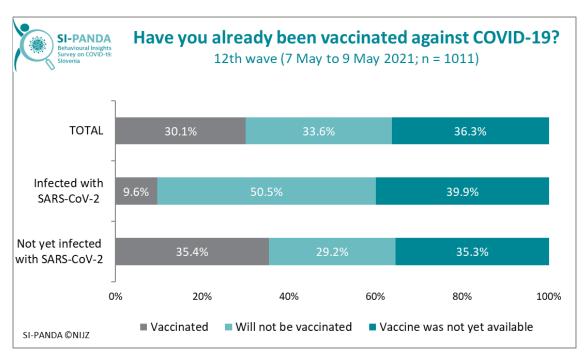


Figure 16: Vaccination against COVID-19, total and by recovery status.

If we compare the last four waves of the survey in terms of vaccination rate, the share of those who do not intend to be vaccinated increased slightly in 11<sup>th</sup> wave, while it decreased again in the 12<sup>th</sup> wave and currently equals 28.6%. As expected, the share of those to whom the vaccine was not yet available decreased, while the share of those vaccinated with two doses increased (Figure 17). Among those who do not intend to be vaccinated are more women, more young people, and people coming from the urban environment and people from Eastern Slovenia.

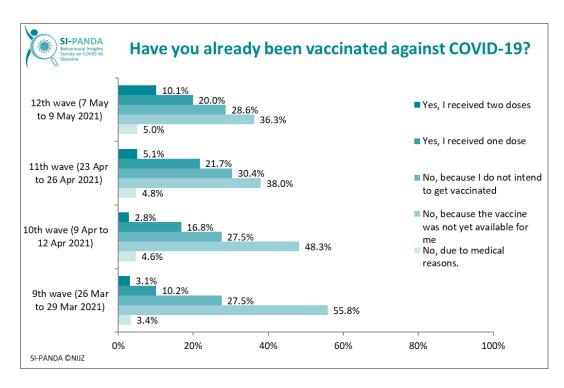


Figure 17: Vaccination against COVID-19, total, 9th to 12th wave of survey.

When asked what the decision to vaccinate will depend on, respondents most agree on average that their decision to vaccinate will depend on whether enough data is available that the vaccine is safe (in 12<sup>th</sup> wave, the average value on a 7-point scale is 5.3), whether sufficient data will be available on whether the vaccine is effective (5.1), whether the vaccine has been in use for a long time (4.7), and on the recommendation of a personal physician (4.3) (Figure 18). Compared to previous wave of the survey, there has been a decrease in agreement with the fact that their decision will depend on whether vaccination is free-of-charge.

However, if we look at what the decision to vaccinate depended on among those who had already been vaccinated against COVID-19, there was also the claim in the first place that the decision to vaccinate depended most on whether enough data was available that the vaccine was safe (average value on a 7-point scale was 5.3). This was followed by a decision based on the recommendation of a personal physician (5.2), and a decision based on the fact that high vaccination coverage will mean the release of restrictions on movement and socializing in groups (also 5.2) (Figure 18).

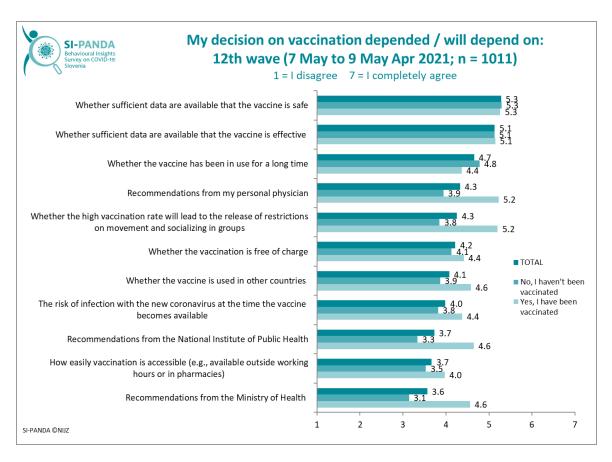


Figure 18: Reasons for the decision to get vaccinated against COVID-19, total, vaccinated and unvaccinated persons.

As many as 25.5% of people believe that vaccination against SARS-CoV-2 is not necessary and that it is better to get over the disease naturally. Regarding age groups, the share of people with such an opinion is, as expected, the highest in the two youngest age groups, where approximately one third of respondents share such an opinion (Figure 19).

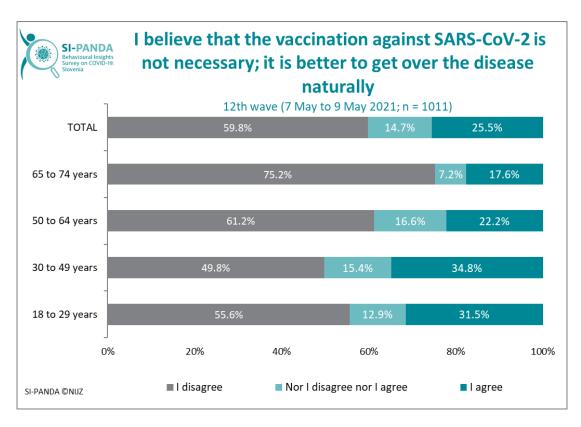


Figure 19: The share of persons who believe that vaccination against SARS-CoV-2 is not necessary, and that it is better to get over the disease naturally, total and by age groups.

In the 9<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> waves of the survey, we also asked about some opinions related to vaccination against COVID-19. As in the 9<sup>th</sup> and 11<sup>th</sup> wave, the relatively high share of those who believe that they do not have enough reliable information about the COVID-19 vaccine (62.8%) still surprises in the 12<sup>th</sup> wave. Just under a half of respondents would be vaccinated if they could choose which vaccine against COVID-19 they will be vaccinated with (47.7% in the 12<sup>th</sup> wave compared to 45.8% in the 9<sup>th</sup> wave). However, compared to the 9<sup>th</sup> wave of the survey, the share of people who would be vaccinated if this were a condition for a holiday abroad decreased significantly, namely by 8.5 percentage points. About 10.5% of people are in distress due to waiting to be vaccinated against COVID-19 (Figure 20).

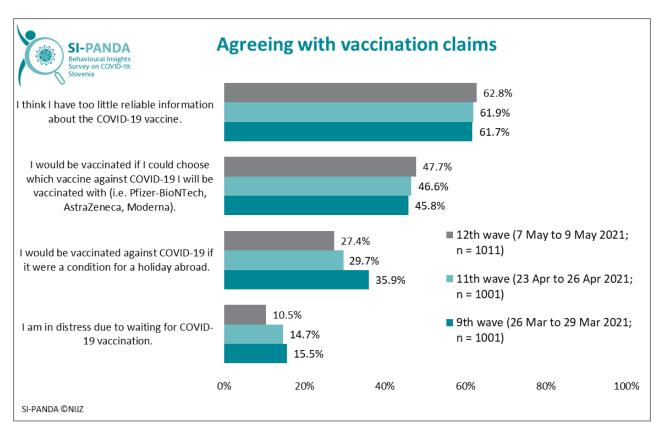


Figure 20: Agreeing with claims on vaccination against COVID-19, 9th, 11th, and 12th wave.

#### **Voluntary free self-testing**

In the 11<sup>th</sup> and 12<sup>th</sup> wave of the survey, we were interested in what respondents thought about free testing for SARS-CoV-2 infection and the availability of services and activities under certain conditions related to it. 73.0% of respondents agree in the 12<sup>th</sup> wave of the survey that residents should have two free PCR tests per month, which would be available without health reasons – the share of these persons has increased by 8.3 percentage points compared to 11<sup>th</sup> wave and is probably related to upcoming holidays and travels abroad. If the condition for using the service is a negative test, 61.8% of respondents believe that a rapid antigen test should suffice. As many as 54.2% believe that all services and activities should be accessible without any COVID-19-related evidence, and just under a third (32.4%) agree that as evidence of a negative test, only a test performed by the PCR method should be valid (Figure 21).

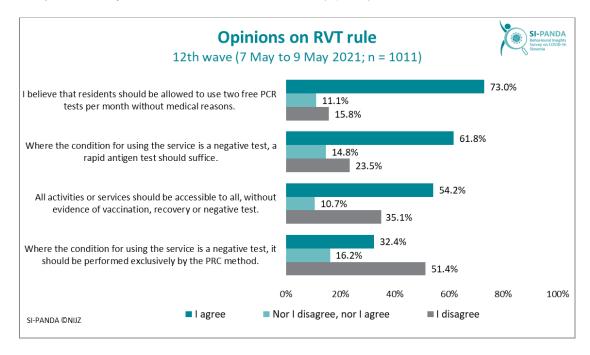


Figure 21: Respondents' opinions on COVID-19 testing and conditions for using services, total.

With regard to age groups, the youngest age group, as expected, has the highest share of those who believe that a rapid antigen test should suffice as evidence (64.1%), while in the oldest age group the share of this opinion is almost equal to the to the share of the opinion that only a test performed by the PCR method should suffice as evidence (Figure 22).

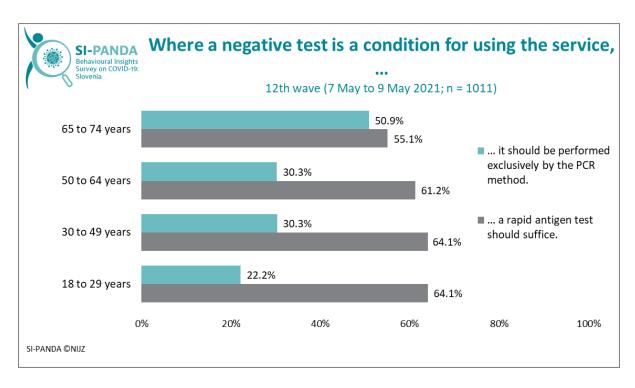


Figure 22: Respondents' opinion on what type of test should suffice as evidence where the condition for using the service is a negative test, by age groups.

If we compare respondents with regard to vaccination rate, among those who do not intent to be vaccinated, the share of those who believe all services and activities should be accessible without any COVID-19-related evidence is the largest (Figure 23).

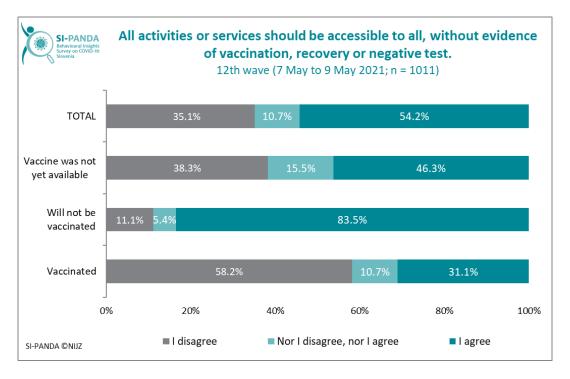


Figure 23: Respondents' opinion on whether all activities and services should be accessible to all, without any evidence on vaccination, recovery or negative test, total and by vaccination rate.

## The impact of the pandemic on lifestyle and bad condition

In the 12<sup>th</sup> wave of the survey, just under a third of respondents (31.6%) stated that they had been less physically active in the last 2 weeks than before the pandemic; a little less than a fifth (17.2%) ate more unhealthy food than before the pandemic; 16.8% of the respondents smoked more than before the pandemic; and 7.8% drank more alcohol than before the pandemic (Figure 24). If we compare all the waves of the survey so far, among the lifestyle factors, the pandemic had the greatest impact on the reduction of physical activity. In the 12<sup>th</sup> wave of the survey, except for smoking, improvements in lifestyle continue, especially in terms of physical activity, but also in terms of eating unhealthy food and drinking alcohol, which is gratifying.

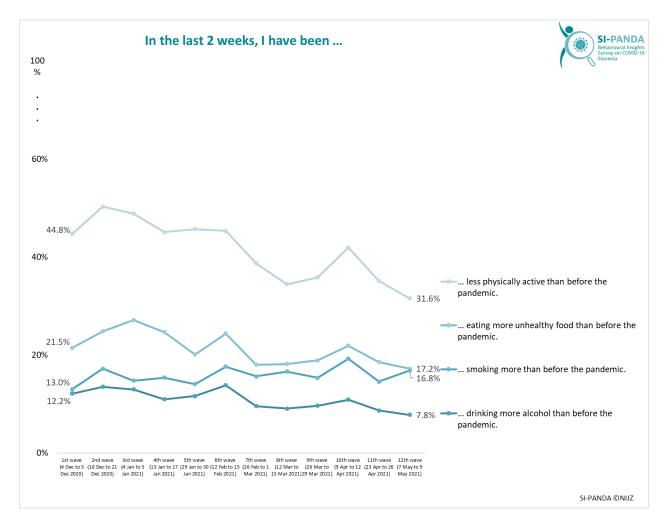


Figure 24: The impact of the pandemic on lifestyle in the last 2 weeks, total, by survey waves.

Throughout the survey, the youngest age group of the respondents reported the unhealthiest lifestyle habits (Figure 25). Compared to other age groups, they ate more unhealthy foods than before the pandemic (28.8% of the respondents aged 18 to 29). Almost a fifth (19.3%) reported that they smoke more than before the pandemic, while 11.4% of those respondents increased alcohol consumption during the pandemic.

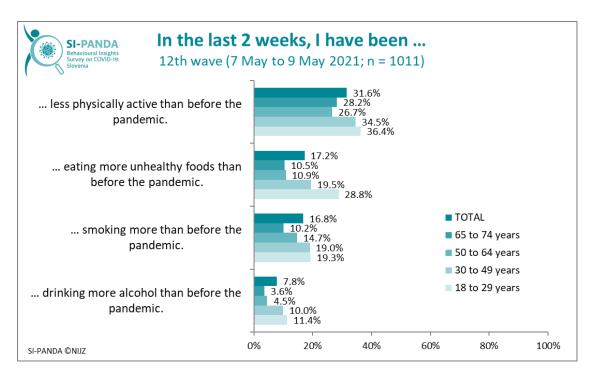


Figure 25: The impact of the pandemic on lifestyle in the last 2 weeks, total and by age groups.

We also checked for the presence of mental health problems during the pandemic. In the 12<sup>th</sup> wave of the survey, we found that 17.2% of respondents had mental health problems and 9.5% had signs of depressive disorder. The youngest age group of respondents (aged 18 to 29) reported the most mental health problems also in the 12<sup>th</sup> wave, with the shares of people with mental health problems (23.2%) highest compared to other age groups (Figure 26). The share of persons with depressive disorder was the highest in the age group 30 to 49 years (12.1%) in this wave of the survey, which could be explained by the fact that the living situation of the youngest age group has improved, mainly due to the opening of faculties, but also due to the release of measures and therefore depressive disorders were less frequent in that population group.

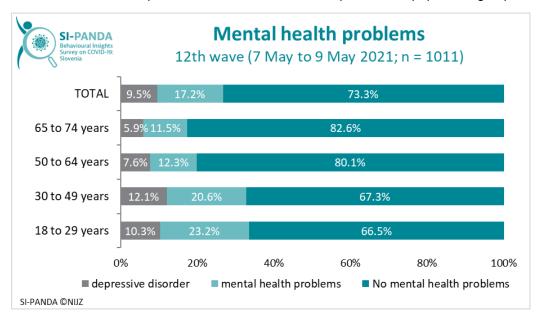


Figure 26: Mental health problems, total and by age groups.

If we compare the presence of mental health problems and the presence of depressive disorder throughout all waves of the survey, we note that the presence of these disorders in the 12<sup>th</sup> wave of the survey decreased in all age groups. The greatest decline in these problems is observed in the youngest age group, which is gratifying, and the reason for the decline is most likely the opening of schools and other relaxations of life, which also relaxes the social life of young people (Figure 27).

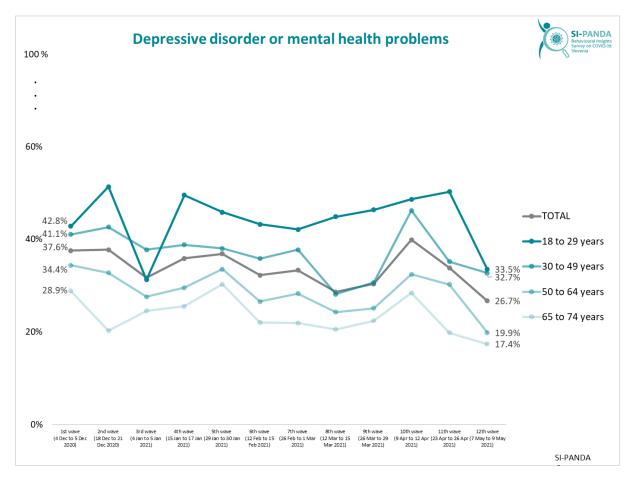


Figure 27: Mental health problems, by age groups and survey waves.

#### **Contact with the healthcare system**

In the 12<sup>th</sup> wave of the survey, a quarter of respondents (25.2%) avoided visiting a doctor due to the problem not related to SARS-CoV-2, and 6.3% postponed vaccination for themselves or their child. Thus, the doctor avoidance and postponing vaccination decreased in the 12<sup>th</sup> wave (Figure 28).

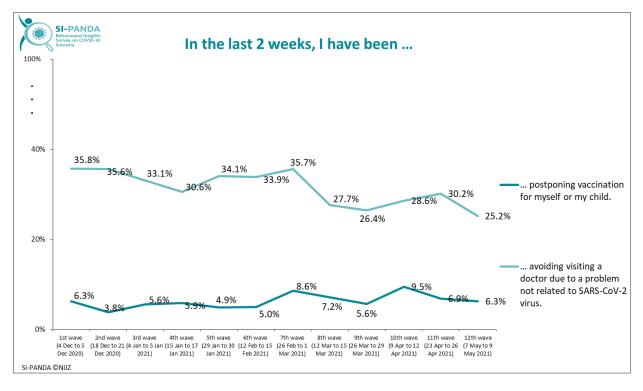


Figure 28: The impact of the pandemic on the contact with healthcare system in the last 2 weeks, total, by survey waves.

Respondents of the youngest age group (28.2%) are still the ones who are most likely to avoid visiting a doctor due to a problem not related to SARS-CoV-2 virus (Figure 29).

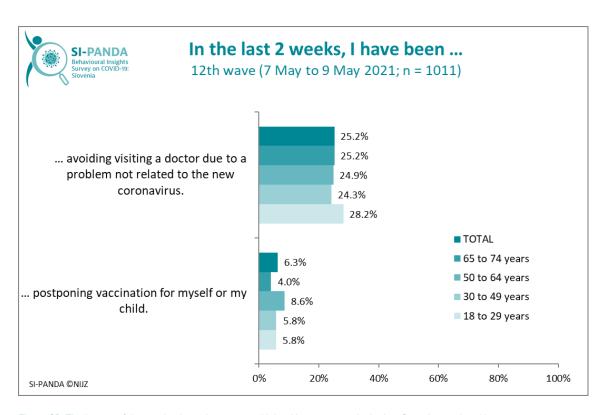


Figure 29: The impact of the pandemic on the contact with healthcare system in the last 2 weeks, total and by age groups.

Due to perceived delayed contacts with the doctor and the medical team, which we perceive throughout the entire duration of the survey, and due to suspended preventive activities at the primary healthcare level, a worsening of the pandemic of chronic non-communicable diseases with all syndemic consequences is expected, probably more pronounced in socioeconomically vulnerable groups.

#### The impact of the pandemic on the financial situation

A fifth (20.9%) of the respondents believe that their financial situation in the last 3 months is worse than before. The share of respondents who believe that their financial situation is worse in the last 3 months than before has decreased by 8.9 percentage points compared to the 1<sup>st</sup> wave of the survey. Respondents, aged 18 to 29, perceive their financial situation the worst (Figure 30) so it will be necessary to pay special social attention to this group also in accordance with the proposed EU programmes for managing the current crisis. Given their employment status, the unemployed and the self-employed perceive their financial situation as bad, which indicates a major public health problem.

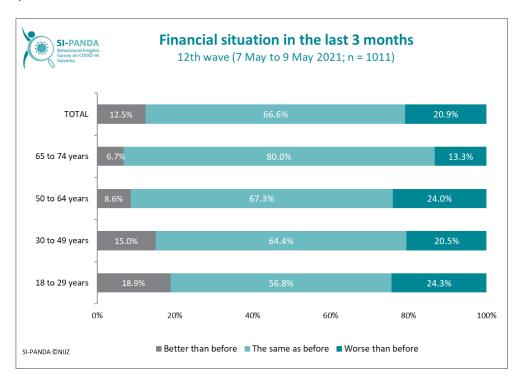


Figure 30: Perception of financial situation in the last 3 months, total and by age groups.

In terms of gender and education, the financial situation in the last 3 months was perceived as worse by the highest share of women with secondary education (27.6%), and by the lowest share of men with college education or higher (15.1).

## Problems after SARS-CoV-2 virus infection recovery – post-COVID syndrome or long COVID

Most people who get COVID-19 recover in a few weeks. But researchers, as well as healthcare professionals, find that in some people, individual symptoms persist for months after diagnosis, or they disappear and reappear weeks or months after initial recovery. Abroad, these problems have been termed post-acute COVID-19 or long COVID. It also occurs in those with a milder form of the disease and even among young adults and children without previous health problems. The symptoms of long-COVID are varied, e.g., fatigue, shortness of breath, insomnia, memory and concentration problems (i.e., foggy brain), heart palpitations, pain in various parts of body, diarrhoea, nausea, etc.<sup>5</sup>.

In the 12<sup>th</sup> wave of the survey, 20.7% of respondents report that they are or have been infected with the SARS-CoV-2 virus so far, of which 87.4% report that the course of the disease was mild, and 12.6% that the course of the disease was more difficult. Respondents who are or have been infected with SARS-CoV-2 virus (194 respondents) were asked in the 11<sup>th</sup> and 12<sup>th</sup> waves about possible problems after recovering from SARS-CoV-2 virus infection.

According to some estimations, various symptoms occur after recovery in 10 to 15% of COVID-19 patients. Therefore, we were interested in whether the subjects who recovered from COVID-19 had or still have one of the symptoms shown below one month after recovering from SARS-CoV-2 virus infection (Figure 31).

We can find that in 12<sup>th</sup> wave most people (75.5%) still had some problems after one month of infection, namely a little less than half (39.8%) felt malaise, fatigue, lack of energy; a little less than a third (30.3%) had problems with perception of taste and smell; approximately a fifth suffered from muscle and joint pains (22.1%) and sleep disorders (21.1%). This is followed by problems with concentration (17.2%), chest pain and difficulty breathing (15.9%), heart palpitations, digestive problems and unpleasant feelings of fear, sadness, etc. (Figure 31). On average, the respondents had two problems. Compared to the 11<sup>th</sup> wave, the average number of problems is the same (2 problems), but in 12<sup>th</sup> wave, the number of people who had individual problems decreased slightly. The data therefore show that the share of people who have health problems one month after COVID-19 is significant, so it is important that the health status of patients is monitored for a longer period of time.

Nalbandian, A., Sehgal, K., Gupta, A. et al. Post-acute COVID-19 syndrome. Nat Med 27, 601–615 (2021). https://doi.org/10.1038/s41591-021-01283-z.

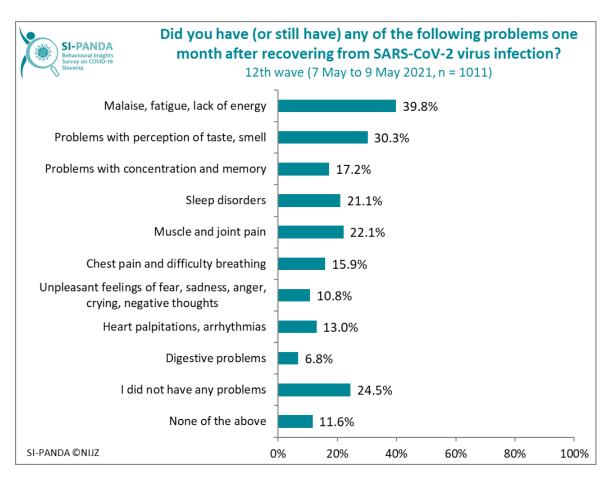


Figure 31: Health problems one month after the respondents had already recovered from SARS-CoV-2 virus infection, total.

Interestingly, in the 12<sup>th</sup> wave, compared to the 11<sup>th</sup> wave, the number of people who had one or two problems increased, while the number of those who had 3 or more problems decreased (Figure 32).

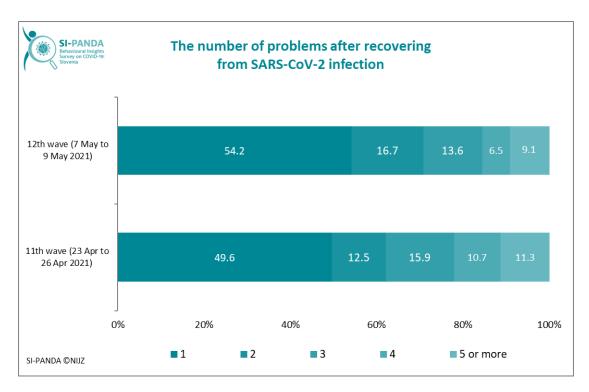


Figure 32: The number of problems after recovery from SARS-CoV-2 infection, 11th and 12th waves.

It is also surprising that more than half of the people (65.2%) did not consult with the doctor on these problems in the 12<sup>th</sup> wave, while in the 11<sup>th</sup> wave there were 58.7% such respondents. Given this, it can be assumed that these are milder health problems, but perhaps also because we do not yet have clear guidelines regarding the treatment of people with long COVID.

Much is still unknown about the long-term effects of SARS-CoV-2 infection on humans, but research is underway. Abroad, many major health centres are already opening specialized clinics to care for people who have permanent symptoms after recovering from COVID-19. Support groups are also available.

It is important to note, however, that most people with COVID-19 recover quickly. Although the risk of long-term health problems after COVID-19 virus infection is relatively small, it is even more important to strictly take precautions, such as washing hands, wearing masks indoors, maintaining physical distance and avoiding crowds, room ventilation, and vaccination when available to the individual.

## Highlighted topic of the 12<sup>th</sup> wave of the survey: Risky behaviours

Respondents in the 12<sup>th</sup> wave of the survey were asked about various risky behaviours – alcohol consumption, the use of cannabis, sedatives or sleeping pills, playing video games and gambling – namely, they were asked if they did so more often during the pandemic or if the behaviour remained the same as before the pandemic or was even less frequent than before the pandemic (the possible answer was also that they do not have certain risky behaviours, e.g. they do not consume alcohol, use cannabis, sedatives / sleeping pills, are not playing video games or gambling).

Of all risky behaviours, respondents most often consume alcohol (65.9%), about a third are gamers (32.4%), slightly more than a quarter are gambling (27.1%) and less than a tenth (9.4%) use sedatives, sleeping pills or cannabis and cannabis-derived products (7.9%).

At the time of the pandemic, just under 8% of respondents reported on playing more video games and consuming more alcohol during the pandemic. About 2% of them answered that they used more sedatives and sleeping pills not prescribed by a doctor during the pandemic, did more gambling and used cannabis and cannabis-derived products more (Figure 33).

In terms of age, two age groups stand out, namely the 18-29 age group, which played video games in the highest share, used more sedatives / sleeping pills, did more gambling than before the pandemic, and the age group 30 to 49, which used more cannabis and consumed more alcohol than before the pandemic (Figure 34).

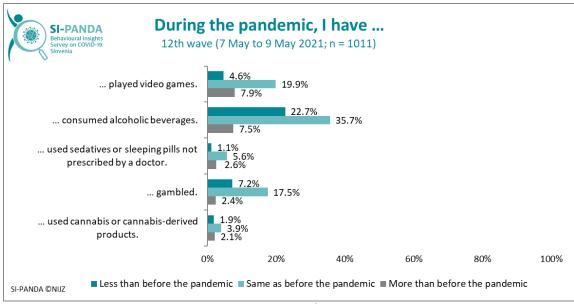


Figure 33: The frequency of risky behaviours during the pandemic, total<sup>6</sup>.

<sup>&</sup>lt;sup>6</sup> The graph does not include those respondents who stated that they do not engage in risky behaviours.

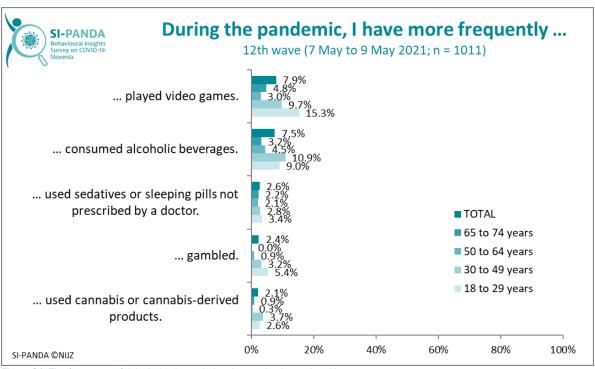


Figure 34: The frequency of risky behaviours during the pandemic, total and by age groups.

In the 12<sup>th</sup> wave of the survey, a good third (34.1%) of respondents reported not drinking alcoholic beverages, 35.7% of them did not change their drinking during the epidemic compared to drinking before it, and those who did, changed it to a greater extent in the direction of reduction (22.7%) than increase of drinking (7.5%) (Figure 35). The fact that most respondents did not change their drinking during the epidemic compared to the time before it, and that a larger share reduced than increased their drinking, applies to both men and women, as well as to respondents of almost all age groups.

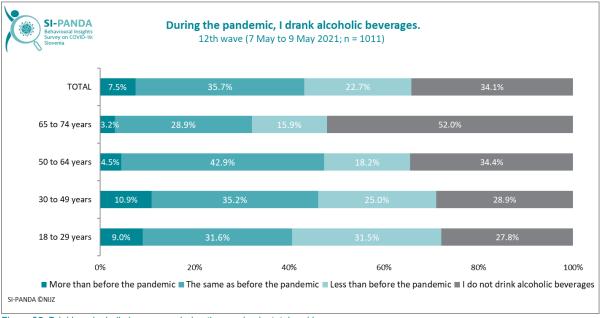


Figure 35: Drinking alcoholic beverages during the pandemic, total and by age groups.

Playing video games is quite common among respondents (regardless of the pandemic), as 32.4% of them play video games. There are more men than women among them. The games are most often played by younger adults (18 to 29 years old).

During the pandemic almost 8% of the respondents played games more often than before the pandemic, with more men than women among them. More frequent playing of video games during the pandemic (than before it) was reported by 15.3% of the respondents aged 18 to 29; 9.7% of the respondents aged 30 to 49; 4.8% of respondents aged 65 to 74; and 3.0% of respondents aged 50 to 64 (Figure 36). Interestingly, in the youngest age group (18 to 29 years), not only are the highest shares of those who played more video games, but also the highest percentages of those who played less during the pandemic than before.

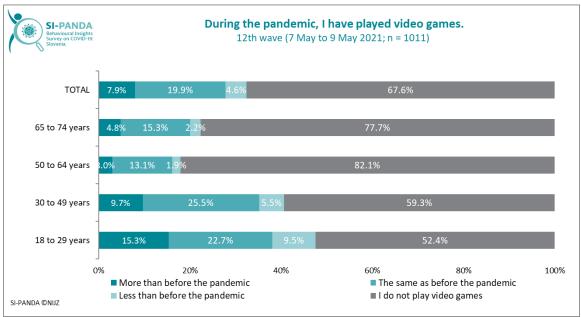


Figure 36: Playing video games during the pandemic, total and by age groups.

Gambling is also quite common among respondents (regardless of the pandemic), as 27.1% of respondents gamble, more men than women, and there are no significant differences between age groups.

During the pandemic, 2.4% of respondents gambled more often than before the pandemic, among them more men than women (Figure 37). During the pandemic, men gambled less in a higher share compared to women. More frequent gambling during the pandemic (as before) was reported by 5.4% of respondents in the 18-29 age group, 3.9% of respondents aged 30-49, 0.9% of respondents aged 65-74, and 0 aged 50 to 64 years (Figure 34). Gambling between the ages of 50 and 74 decreased the most during the pandemic.

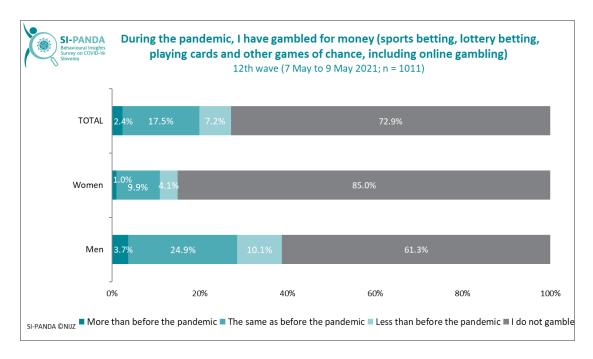


Figure 37: Gambling for money during the pandemic, total and by gender.

#### Use of cannabis and sedatives or sleeping pills not prescribed by a doctor

The COVID-19 pandemic has affected the lives of many individuals, families, and communities around the world. Responses to the pandemic vary from person to person, and in everyday life they can face the pandemic using a variety of both positive and negative strategies. One of the negative pandemic coping strategies may also be the use of illicit drugs and psychoactive substances (PAS) 7. In addition to the risk of SARS-CoV-2 virus infection, and individual's use of illicit drugs exposes them to additional risks associated with drug use, such as the presence of associated physical and mental problems and risky lifestyle factors8.

In Slovenia, the use of the illicit drug cannabis is most widespread among the general population and adolescents; this drug has been used by about a fifth of adults and an equal proportion of adolescents at some point in their lives 9,10,11. The harmful effects of cannabis use can be immediate or long-term. Current adverse effects include anxiety, panic, and increased risk of traffic accidents<sup>12</sup>. One of the more serious long-term adverse effects of regular cannabis use is addiction, which develops in about 9% of users<sup>13</sup>. Regular cannabis use is also associated with an increased risk of chronic bronchitis and impaired respiratory function, as well as psychotic signs and disorders, especially if users have had such problems in the past or are present in the

<sup>7</sup> MacMillan t, Corrigan MJ, Coffey K, Tronnier CD, Wang D, Krase K. Exploring Factors Associated with Alcohol and/or Substance Use during the COVID-19 Pandemic. International journal of Mental Health and Addoiction. Springer: Published on-line 26 January 2021.

<sup>8</sup> Drev A, Hočevar Grom A, Jandl M, Kvaternik I. (2020) Posledice covid-19 za uporabnike drog in ponudnike storitev obravnave in pomoči. Ljubljana: Nacionalni inštitut za javno zdravje. E-material. Available at: https://www.nijz.si/sites/www.nijz.si/files/publikacijedatoteke/emcdda\_prevod\_koncna\_230420.pdf.

<sup>9</sup> Drev A, Hočevar Grom A. (2020) Stanje na področju prepovedanih drog v Sloveniji 2019. Ljubljana: Nacionalni inštitut za javno zdravje. Egradivo. Dostopno na: https://www.nijz.si/sites/www.nijz.si/files/publikacije-datoteke/np\_2019\_koncna.pdf

<sup>10</sup> Jeriček Klanšček H, Roškar M, Drev A, Pucelj V, Koprivnikar H, Zupanič T, Korošec A. Z zdravjem povezana vedenja v šolskem obdobju med mladostniki v Sloveniji. Izsledki mednarodne raziskave HBSC, 2018. Ljubljana: Nacionalni inštitut za javno zdravje, 2019.

<sup>11</sup> Urdih Lazar T, Stergar E. Evropska raziskava o alkoholu in preostalih drogah (ESPAD), Slovenija 2019. Rezultati raziskave. Ljubljana: Univerzitetni klinični center Ljubljana, Klinični inštitut za medicine dela, prometa in športa, 2021. E-material.

<sup>12</sup> Hall W, Degenhardt L. Adverse health effects og non-medical cannabis use. Lancet 2009; 374: 1383–1391.

<sup>13</sup> Anthony JC. The epidemiology of cannabis dependence. In: Roffman RA, Stephens RS (eds) Cannabis dependence: its nature, consequence and treatment. Cambridge: Cambridge University Press, 2005: 58-105.

family<sup>12,14</sup>. In adolescents, regular cannabis use often results in poorer academic performance, a higher likelihood of using other illicit drugs, and can also adversely affect mental health later in adulthood<sup>12,15,16</sup>. Cannabis use can reduce the birth weight of a new-born during pregnancy<sup>17</sup>. Otherwise, the consequences of cannabis use are greatly influenced by the frequency of use, the use in large quantities, the method of use, the early start of use, and the social environment in which the drug is used<sup>12</sup>.

Misuse of prescription drugs (including non-medical use of drugs) means taking the drug in a different way or in a different dose than prescribed by a doctor<sup>18</sup>. Although most people take prescription drugs responsibly, drug abuse has become a growing public health problem worldwide in recent years<sup>19</sup>.

7.9% of respondents in the 12<sup>th</sup> wave of the SI-PANDA survey (Figure 33) confirmed that they used cannabis or a cannabis-derived product during the pandemic, and the use was more widespread among men (11%) than among women (4%). Respondents in the younger age groups, namely 18-29 years (15.4%) and 30-49 years (10.3%) reported the use of cannabis or cannabis derived products to a greater extent that respondents in the older age groups, namely 50-64 years (4.1%) and 65-74 years (1.5%). Differences in use by gender and by age groups are consistent with many other studies on cannabis use in the general population and among young people, although differences in gender in younger age groups are less and less noticeable in these studies<sup>9,10,11,20</sup>.

Higher levels of use were further observed among respondents with mental health problems (11.8%) and among those who had not yet been vaccinated (9.5%) compared to those who did not have mental health problems (7.0%) and those who have been vaccinated (4.4%). The link between cannabis use and mental health problems has recently been established by various studies, and this link is increasingly being described in literature; for example, the results of a U.S. national survey show that people with more severe mental health disorders are more likely to use cannabis than those without mental disorders<sup>21,22</sup>. However, the differences in use between vaccinated and unvaccinated can most likely be explained by the non-vaccination of the younger age group, where cannabis use is more widespread.

Overall, respondents reported using cannabis or cannabis-derived products to the same extent as before the pandemic (3.9%). If we compare the respondents who reported less use than before the pandemic (1.9%) with the respondents who used more than before the pandemic (2.1%), we find that the percentage of the latter is slightly higher (Figure 33). Among men and in both younger age groups, the percentages of those who used more during the epidemic were slightly higher than among women and in both older age groups. As foreign research suggests, regular and

<sup>&</sup>lt;sup>14</sup> Anthony JC. The epidemiology of cannabis dependence. In: Roffman RA, Stephens RS (eds) Cannabis dependence: its nature, consequence and treatment. Cambridge: Cambridge University Press, 2005: 58–105.

<sup>&</sup>lt;sup>15</sup> Degenhardt L, Hall W. Extent of illicit drug use and dependence, and their contribution to the global burden of disease. Lancet 2012; 379: 55–70.

<sup>&</sup>lt;sup>16</sup> Macleod J, Oakes R, Copello A, Crome N, Egger M, Hickman M, Oppenkowski T, Stokes-Lampard H, Smith GD. Psychological and social sequelae of cannabis and other illicit drug use by young people: a systematic review of longitudinal, general population studies. Lancet 2004; 363: 1579–1588

<sup>&</sup>lt;sup>17</sup> EMCDDA. Monographs 8 Volume II. A cannabis reader: global issues and local experiences. Perspectives on cannabis controversis, treatment and regulation in Europe. Luxembourg: Office for Official Publications of the European Communities, 2008.

<sup>&</sup>lt;sup>18</sup> National Institute on Drug Abuse (NIDA) Misuse of Prescription Drugs, available 13.5.2021 at <a href="https://www.drugabuse.gov/publications/research-reports/misuse-prescription-drugs/overview">https://www.drugabuse.gov/publications/research-reports/misuse-prescription-drugs/overview</a>.

<sup>&</sup>lt;sup>19</sup> UNODC, World Drug Report 2010 (United Nations Publication, Sales No. E.10.XI.13). available 13.5.2021 at: https://www.unodc.org/documents/wdr/WDR 2010/World Drug Report 2010 lo-res.pdf).

<sup>&</sup>lt;sup>20</sup> Drev A, Kvaternik I, Macur M. Prepovedane droge. V: Koprivnikar H, Zorko M, Drev A, Keršmac Hovnik M, Kvaternik I, Macur M (urednice). (2015) Uporaba tobaka, alkohola in prepovedanih drog med prebivalci Slovenije ter neenakosti in kombinacije te uporabe. Ljubljana: Nacionalni inštitut za javno zdravje, 2015. E-publikacija. Available at: <a href="http://www.nijz.si/sites/www.nijz.si/files/publikacije-datoteke/uporaba\_tobaka\_alkohola\_in\_drog.pdf">http://www.nijz.si/sites/www.nijz.si/sites/publikacije-datoteke/uporaba\_tobaka\_alkohola\_in\_drog.pdf</a>.

Degenhardt L, Hall W, Lynskey M. Exploring the association between cannabis use and depression. Addiction 2003; 98:1493-1504.
 Substance Abuse and Mental Health Services Administration. Key substance use and mental health indicators in the United States: Results from the 2018 National Survey on Drug Use and Health. Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, 2019. Available at: <a href="https://www.samhsa.gov/data/">https://www.samhsa.gov/data/</a>.

frequent cannabis users are more likely to increase its use during a pandemic, while occasional users are more likely to reduce or even abandon cannabis use<sup>23,24</sup>. According to Winstock et al. <sup>25</sup>, the main reasons for the increase in cannabis use are more free time and boredom. The author<sup>26</sup> further notes that both, those with mental health problems and those without them, reported a similar percentage of increased use during the pandemic. However, users with mental health problems were more likely to cite stress management, loneliness, and depression as key reasons for increased use during the pandemic.

The use of sedatives or sleeping pills not prescribed by a doctor during the pandemic was reported by 9.4% of respondents. The highest levels of use of sedatives or sleeping pills not prescribed by a doctor were found among respondents with depressive disorder (22.5%), mental health problems (18.7%) and chronic illness (15.8%). These data are consistent with the finding of a systematic review of studies that mental health problems and other health problems are one of the most common reasons for using non-prescribed medications<sup>27</sup>.

Otherwise, respondents generally reported that sedatives or sleeping pills not prescribed by a doctor were used to the same extent as before the pandemic (5.6%). If we compare the respondents who reported lower use than before the pandemic (1.1%) with the respondents who used more than before the pandemic (2.6%), we find that the percentage of the latter is slightly higher (Figure 33). The differences between these two percentages are highest in the three age groups described above, where we also detected the highest levels of use. Winstock et al<sup>25</sup>. explain the use of sedatives among drug users as a strategy to deal with the COVID-19 pandemic and also as compensating for the use of one PAS with another due to poorer access to illicit drugs. The use of different PAS as a coping strategy for COVID-19 pandemic was also detected in an online study involving residents of Canada and the United States; this was reported by about a third of respondents. However, the key factors that increased the risk of using PAS during the pandemic were the following: the use of social media as a source of information, personal impairment due to COVID-19, childcare problems, and non-involvement or disconnection with the religious community<sup>7</sup>.

However, various domestic and foreign studies conducted in the first wave of the COVID-19 pandemic generally show that drug use has decreased<sup>23,28,24,29</sup>. The only exception was the use of drugs from the group of benzodiazepines and hypnotics, which increased<sup>30,25</sup>. Data from a survey conducted among drug users in Slovenia show that in the first wave about a quarter of surveyed drug users reduced their use, and 15% reported that they did not use drugs in this period. Otherwise, during the first wave of the pandemic, the most widespread illicit drug was cannabis<sup>28</sup>.

<sup>&</sup>lt;sup>23</sup> EMCDDA. (2020) EMCDDA trendspotter briefing. Imapct of COVID-19 on patterns of drug use and drug related harms in Europe. European Monitoring Centre for Drugs and Drug Addiction. E-material. Available at: <a href="https://www.emcdda.europa.eu/publications/ad-hoc-publication/impact-covid-19-patterns-drug-use-and-harms\_en">https://www.emcdda.europa.eu/publications/ad-hoc-publication/impact-covid-19-patterns-drug-use-and-harms\_en</a>

<sup>&</sup>lt;sup>24</sup> Observatoire Francais des Drogues et des Toxicomanies. (2020) Addictions in France during lockdown (March 17th – May 11th, 2020). E-material.

<sup>&</sup>lt;sup>25</sup> Winstock AR, Davies EL, Gilchrist G, Zhuparris A, Ferris JA, Maier LJ and Barratt MJ. (2020), Global Drug Survey special edition on COVID-19: interim report. E-material. Available at: http://globaldrugsurvey.com.

<sup>&</sup>lt;sup>26</sup> Winstock AR, Davies EL, Zhuparris A, Gilchrist G, Davies ÉL, Puljević C, Potts L, Maier LJ, Ferris JA, Barratt MJ. (2020a), Global Drug Survey special edition on COVID-19. Key findings report: Executive summary. E-material. Available at: <a href="http://globaldrugsurvey.com">http://globaldrugsurvey.com</a>.

<sup>&</sup>lt;sup>27</sup> Bennett T, Holloway K. Motives for illicit prescription drug use among university students: A systematic review and meta-analysis. International journal of Drug Policy 2017; 44:12-22.

<sup>&</sup>lt;sup>28</sup> Hočevar Grom A, Drev A, Lavtar D, Rostohar K, Jandl M. (2021) Vpliv prvega vala pandemije covid-19 na uporabnike drog in ponudnike storitev obravnave v Sloveniji. Ljubljana: Nacionalni inštitut za javno zdravje. E-material. Available at: <a href="https://www.nijz.si/sites/www.nijz.si/files/publikacije-datoteke/publikacija covid droge novo.pdf">https://www.nijz.si/sites/www.nijz.si/files/publikacije-datoteke/publikacija covid droge novo.pdf</a>.

<sup>&</sup>lt;sup>29</sup> Sande M, Simona Š, Paš M, Verdenik M. (2020) Končno poročilo raziskave o spremembah značilnosti uporabe drog in na trgu drog v času epidemije COVID-19. Neobjavljeno raziskovalno poročilo. Ljubljana: Združenje Drogart.

<sup>30</sup> Spanish Observatory on Drugs and Addiction (OEDA). OEDA-COVID Survey, PPT presentation. Ministry of Health, 26. March 2021.

As the reasons why they reduced or stopped using drugs, the surveyed users in the Slovenian survey most often stated that there were fewer opportunities for drug use, poorer access to drugs and living conditions that made it difficult to use drugs. About a quarter of respondents in the same survey reported that they increased drug use during the pandemic, citing boredom and anxiety, or easier coping with the COVID-19 pandemic, as two key reasons for this. Among cannabis users, there was the highest percentage of those who reported more frequent use during the pandemic period, namely almost a quarter of them<sup>28</sup>. According to Winstock et al. <sup>25</sup>, the main reasons for the increase in cannabis use are more free time and boredom.

Recent data from various EU countries suggest that drug use has reached pre-pandemic levels since the release of measures after the first wave of the pandemic<sup>31</sup>.

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<sup>&</sup>lt;sup>31</sup> EMCDDA. (2021) Imapet of COVID-19 on drug-markets, use, harms and drug services in the community and prisons. Results from an EMCDDA trendspotter study April 2021. European Monitoring Centre for Drugs and Drug Addiction. E-material. Available at: <a href="https://www.emcdda.europa.eu/system/files/publications/13745/TD0321143ENN">https://www.emcdda.europa.eu/system/files/publications/13745/TD0321143ENN</a> 002.pdf.



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