



National Institute of **Public Health** 

# COVID-19 PANDEMIC IN Slovenia

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

18<sup>th</sup> wave

Date of publishing: 7. 12. 2021

Ljubljana, 2021

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Design: Andreja Frič Tadeja Horvat

National Institute of Public Health web page: www.nijz.si

SI-PANDA research web page: https://www.nijz.si/sl/raziskava-o-vplivu-pandemije-na-zivljenje-si-panda-20202021

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## **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 virus 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.

<sup>&</sup>lt;sup>1</sup> 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 takes place in nineteen replicates starting on 4 December 2020. The first part of the survey (up to and including the 12<sup>th</sup> wave) was conducted by the Mediana Institute for Market and Media Research on behalf of the National Institute of Public Health (NIJZ); and the second part is conducted by Valicon. The first twelve repetitions were performed once every two weeks and the second part once a month. Data are analysed at the NIJZ.

Selected panel members are invited to the online survey, which takes place through the online panel. Each wave of online survey involves a sample of about 1,000 adults aged 18 to 74.

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, and we also included some additional questions.

The data presented in the report are weighted by gender, age groups and statistical region.

The report mostly presents data from the 18<sup>th</sup> wave of the panel web survey, that took place from 9 November 2021 to 12 November 2021 on a sample of 1,026 adults aged 18 to 74 years. Some comparisons with previous waves of survey are also shown.

So far, the following waves of survey have been conducted:

1 <sup>st</sup> wave:	from 4 Dec 2020 to 6 Dec 2020	10 <sup>th</sup> wave:	from 9 Apr 2021 to 12 Apr 2021
2 <sup>nd</sup> wave:	from 18 Dec 2020 to 21 Dec 2020	11 <sup>th</sup> wave:	from 23 Apr 2021 to 26 Apr 2021
3 <sup>rd</sup> wave:	from 4 Jan 2021 to 5 Jan 2021	12 <sup>th</sup> wave:	from 7 May 2021 to 9 May 2021
4 <sup>th</sup> wave:	from 15 Jan 2021 to 17 Jan 2021	13 <sup>th</sup> wave:	from 8 Jun 2021 to 10 Jun 2021
5 <sup>th</sup> wave:	from 29 Jan 2021 to 30 Jan 2021	14 <sup>th</sup> wave:	from 6 Jul 2021 to 9 Jul 2021
6 <sup>th</sup> wave:	from 12 Feb 2021 to 15 Feb 2021	15 <sup>th</sup> wave:	from 25 Aug 2021 to 28 Aug 2021
7 <sup>th</sup> wave:	from 26 Feb 2021 to 1 Mar 2021	16 <sup>th</sup> wave:	from 21 Sept 2021 to 23 Sept 2021
8 <sup>th</sup> wave:	from 12 Mar 2021 to 15 Mar 2021	17 <sup>th</sup> wave:	from 12 Oct 2021 to 15 Oct 2021
9th wave:	from 26 Mar 2021 to 29 Mar 2021	18 <sup>th</sup> wave:	from 9 Nov 2021 to 12 Nov 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**

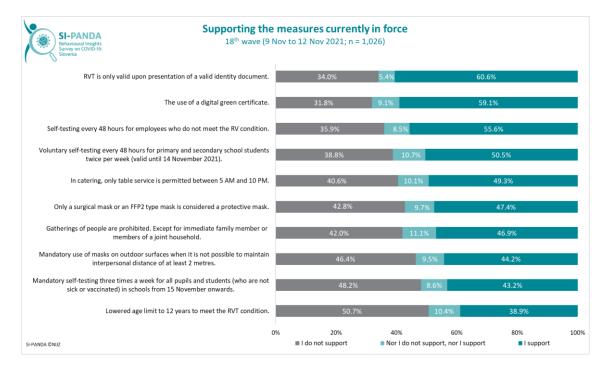


	Indicator	<b>1st wave</b> (4 Dec to 6 Dec 2020) <b>%</b>		18th wave (9 Nov to 12 Nov 2021) %
	<b>Testing in case of close contact with a COVID-19 positive person</b> (the share of respondents who would definitively get tested in case they were in contact with COVID-19 positive person and would not develop any symptoms themselves)	64.4	67.9	82.9
	Vaccination rate (the share of respondents who were vaccinated with at least one dose of COVID-19 vaccine)	/	49.0	71.3
	Hesitation regarding vaccination (the share of respondents who do not intend to be vaccinated)	/	32.1	23.4
	<b>Long COVID</b> (the share of respondents who reported at least one medical problem one month after the recovery from the infection)	/	73.5	67.5
	Avoiding visiting the doctor due to a non-COVID-19 problem (the share of respondents who avoided visiting the doctor in the last 2 weeks due to a non-COVID-19 problem)	35.8	27.6	29.5
	<b>Physical activity</b> (the share of respondents who reported they were less physically active in the last 2 weeks than before the pandemic)	44.8	32.6	33.7
2 <sup>5</sup> /5	<b>Stress</b> (the share of respondents who have often, or every day, felt tense, stressed or under a lot of pressure in the last 14 days)	/	23.3	22.6
	Mental health problems (the share of respondents with depressive disorder or mental health problems)	37.5	37.7	38.0
	<b>Deterioration of the personal financial situation</b> (the share of respondents who estimated that their financial situation in the last 3 months was worse than before)	31.4	24.1	25.5

## **MAIN RESULTS**

### Supporting the measures currently in force

Measures to prevent and limit the spread of SARS-CoV-2 virus are in force for a long time and are very diverse. The measures have been varying between individual waves of the survey and have received very different support. We are presenting opinions on the measures that were in force at the time of the survey, namely from 9 to 12 November 2021. During this time, the measure receiving the greatest support was that the RVT<sup>3</sup> condition certificate is only valid upon presentation of a valid identity document (60.6%), more than half of respondents also supported the use of a digital green certificate and self-testing every 48 hours for employees who do not meet the RV<sup>4</sup> condition (Figure 1). The measure of lowering the age limit to 12 years to meet the RVT condition received the least support (38.9%).



#### Figure 1: Supporting the measures currently in force, total.

In the 18<sup>th</sup> wave of the survey, 46.3% of respondents believed that measures related to SARS-CoV-2 virus unfairly limit the lives of some population groups more than others. The percentage of persons with such opinion is declining in the last five waves. On the other hand, 40.9% of the respondents believe that the measures infringe on our rights to an appropriate extent, given the current state of the pandemic. The percentage of persons with such opinion has been relatively stable throughout the survey.

The share of respondents who estimate that the inhabitants of Slovenia follow the measures related to the control of the SARS-CoV-2 virus is the lowest so far – only 22.5% of the respondents share this opinion. The percentage decreased by 6.5 percentage points from the previous wave

<sup>&</sup>lt;sup>3</sup> RVT condition: recovered, vaccinated, tested.

<sup>&</sup>lt;sup>4</sup> RV condition: recovered, vaccinated.

of the survey, and by as much as 24.9 percentage points from the 13<sup>th</sup> wave of the survey, which was conducted in June this year. This data, which is probably based on the personal observations of the respondents at a time when there is an extremely bad epidemiological situation in Slovenia and a very large number of infected people, is worrying (Figure 2).

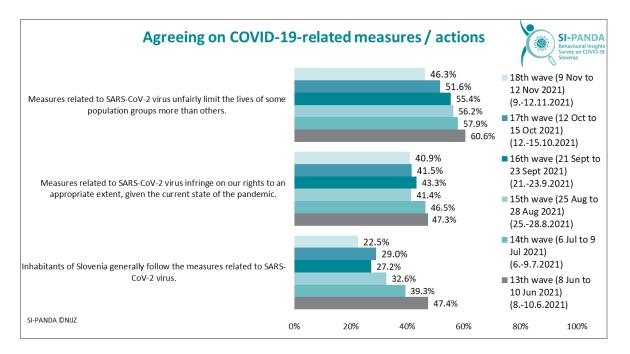


Figure 2: Opinions on COVID-19-related measures / actions, total and by survey waves.

According to vaccination status, almost a quarter more of those who will not be vaccinated than those who already are agree with the statement that measures related to the SARS-CoV-2 virus are unfairly limiting the lives of some groups of the population more than others (Figure 3).

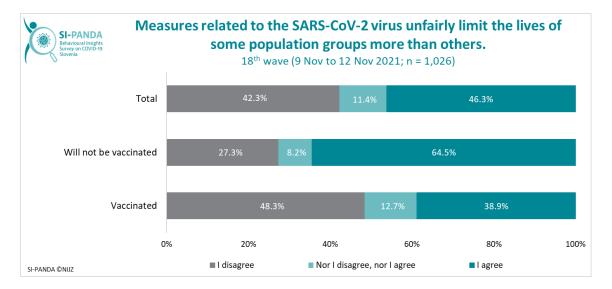


Figure 3: Opinion on whether measures related to SARS-CoV-2 virus unfairly limit the lives of some population groups more than others, total and by vaccination status.

Given that the autumn and religious holidays took place a few days before the 18<sup>th</sup> wave of the survey, we asked the respondents whether they socialized more with other people during this

time. 14.7% of respondents reported that they socialized more than in the previous period; the largest share of such people was among the youngest respondents, among whom a good fifth of the respondents stated that they socialized more than in the previous period (Figure 4).

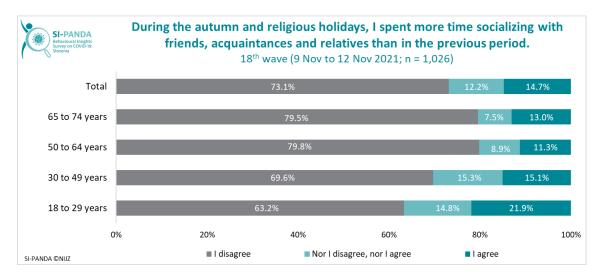


Figure 4: Socializing with friends, acquaintances and relatives during the autumn and religious holidays, total and by age group.

## "Recovered, vaccinated, tested" (RVT) rule

Since the 11<sup>th</sup> wave of the survey, we were interested in what the respondents thought about the availability of services and activities under certain conditions related to SARS-CoV-2 virus or RVT condition. 49.9 percent of respondents believe that vaccinated people should generally be subject to less stringent restrictions than unvaccinated ones – the largest share of respondents with such opinion is among those in the 65–74 age group (Figure 5).

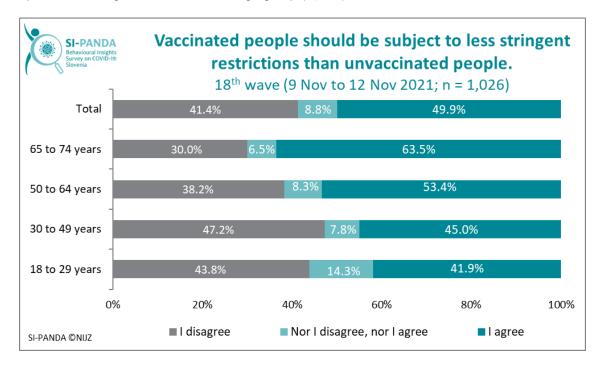


Figure 5: Opinion on the fact that vaccinated people should be subject to less stringent restrictions than unvaccinated ones, total and by age groups.

If in the 11<sup>th</sup> wave of the survey (23 Apr to 26 Apr 2021), a good half of the respondents were of the opinion that all activities or services should be accessible without evidence of vaccination, recovery or a negative test, in the 18<sup>th</sup> wave of the survey only 31.3% of such persons remain, which is the lowest so far. This indicates that the awareness has increased among people on the importance of the RVT condition in reducing the number of infections. Among those who still agree with the availability of services without all the evidence, one third are under the age of 50 (Figure 6). This may be related to lower vaccination rates among younger people and a higher proportion of those who do not intend to be vaccinated in the youngest age groups (data from previous waves of the survey).

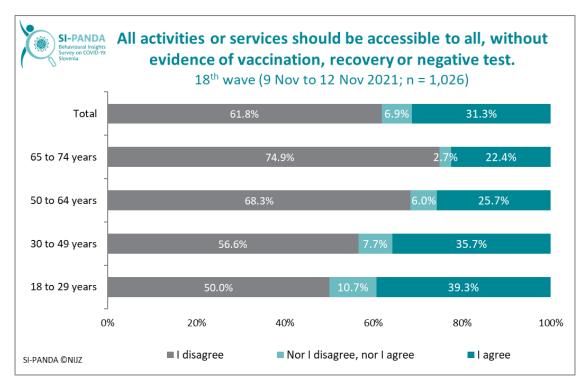
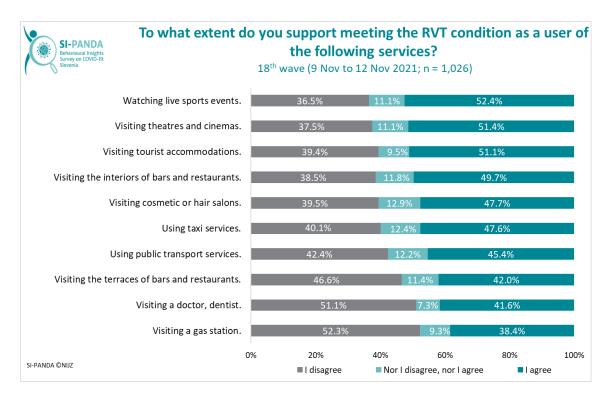


Figure 6: Respondents' opinion on whether all activities and services should be accessible to all, without any RVT evidence, total and by age groups.

If we compare respondents with regard to vaccination status, 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.

In the 18<sup>th</sup> wave, we asked the respondents to what extent they support meeting the RVT condition as users of the individual services or activities. To the greatest extent, the respondents support meeting the RVT condition when watching live sports events, when visiting theatres or cinemas, and when visiting the tourist accommodations (Figure 7). Respondents least agree with the need to meet the RVT condition when visiting a doctor and dentist (41.6%) and when visiting gas stations (38.4%).



#### Figure 7: Supporting meeting the RVT condition as a user of various services, total.

For all listed services or activities, respondents from the oldest age group (65–74 years) agree in the largest share with the need to meet the RVT condition, while, as expected, respondents from both youngest age groups, ie. respondents up to 49 years of age agree with it in the smallest share (Figure 8). Support for meeting the RVT condition for individual services varies between age groups and of course depends on various factors, including how important these services are to people of a certain age.

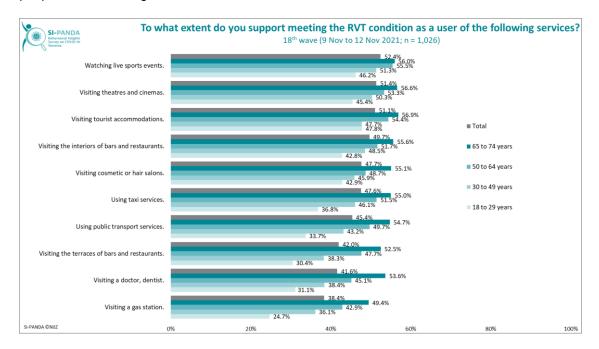


Figure 8: Supporting meeting the RVT condition as a user of various services, total and by age groups.

Support for meeting the RVT condition has increased for all activities compared to the previous wave of the survey, which confirms the increase in awareness of the importance of the RVT condition among all age groups and is probably also related to the deterioration of the epidemiological situation in Slovenia (Figure 9).

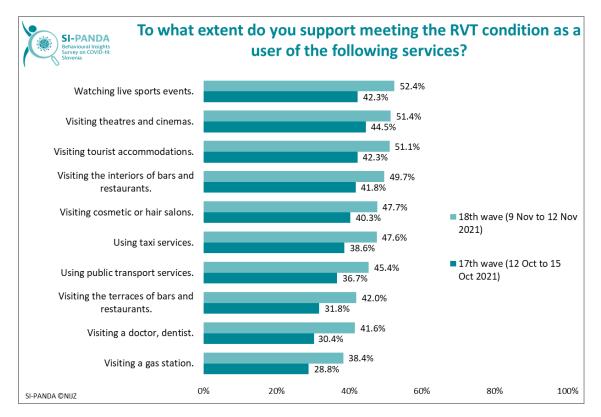


Figure 9: Supporting meeting the RVT condition as a user of various services, total, 17th and 18th waves of the survey.

More than half of the respondents support the meeting (62.8%) and checking (58.9%) of the RVT condition in the workplace. Support for meeting and checking the RVT condition in the workplace varies greatly among respondents according to their vaccination status. Around three times more respondents who are vaccinated compared to those who are not vaccinated support meeting and checking the RVT condition in the workplace. Overall, respondents express slightly greater support for meeting (62.8%) than checking (58.9%) the RVT condition in the workplace (Figure 10).

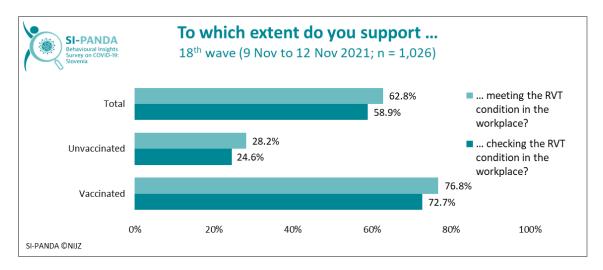
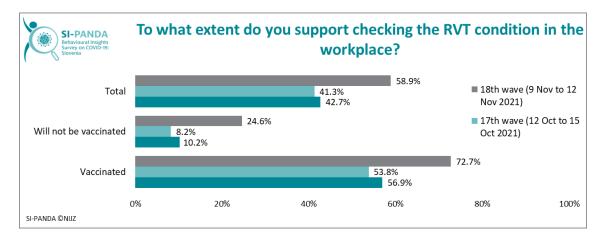


Figure 10: Supporting meeting and checking the RVT condition in the workplace, total and by vaccination status.

Support for checking the RVT condition in the workplace is currently the highest in the last three waves of the survey. Compared to the previous wave, it increased both among the vaccinated, by almost 19 percentage points, and among those who do not intend to be vaccinated – by 16.4 percentage points. The increase in support is probably the result of the large number of infections in Slovenia at the time the survey was conducted (Slika 11).



Slika 11: Supporting meeting and checking the RVT condition in the workplace, total and by vaccination status 16<sup>th</sup> to 18<sup>th</sup> waves of the survey.

At a time when it was not yet necessary to show a personal document with the certificate of meeting the RVT condition, there was a lot of talk in the media about the misuse of certificates. Therefore, in the 18<sup>th</sup> wave of the survey, respondents were also asked whether they had ever used another person's RVT certificate in order to meet the RVT condition. 28.3% of respondents reported that they had used it before; 8.1% of respondents use another person's RVT certificate often or on a daily basis. The majority of respondents who use another person's RVT certificate frequently or daily are in the 18–29 age group (Figure 12).

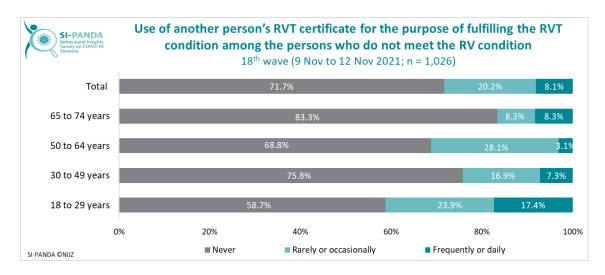


Figure 12: Use of another person's RVT certificate among persons who do not meet the RV condition, total and by age groups.

Also in the 18<sup>th</sup> wave of the survey, we asked about the opinion regarding the introduction of the recovery or vaccination (RV) rule for employees in certain fields of work, or for all adult residents. The largest share of respondents supports the introduction of the RV rule for employees in the health sector (63.4%); in the age group 65–74 years, as many as 79.6% of respondents would support this introduction (Figure 13). More than half of the respondents also support the RV rule for employees in the state administration (57.5%) and in education sector (56.9%), while slightly less than half of the respondents (48.6%) support the introduction of the RV rule for all adult residents of Slovenia. Support for the introduction of the RV rule for all mentioned groups is the highest in the oldest age group of respondents. The biggest difference between the oldest and youngest age groups is in support for the introduction of the RV rule for all adult residents, i.e., 35.2 percentage points.

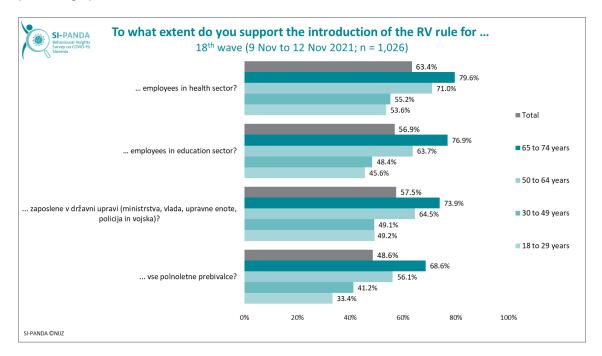


Figure 13: Supporting the introduction of the RV rule for employees in the listed fields of work or for all adult residents, total and by age groups.

It is interesting that, compared to the previous wave of the survey, support for the introduction of the RV rule for employees in all the listed activities and also for all adult residents has risen among all respondents, as well as among persons who have not been vaccinated (Figure 14).

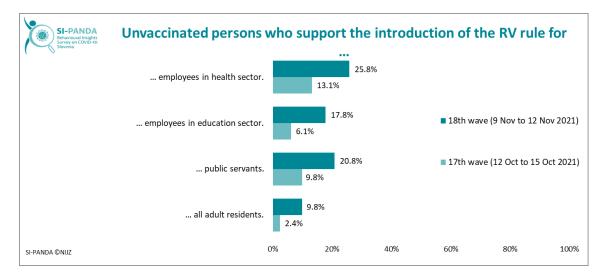


Figure 14: Supporting the introduction of the RV rule for employees in the listed fields of work or for all adult residents, unvaccinated, 17<sup>th</sup> and 18<sup>th</sup> wave of the survey.

We also asked the respondents whether they think that vaccination against COVID-19 should be mandatory for employees in certain fields of work or for all adults. Here, too, the largest share of respondents supports the introduction of mandatory vaccination for employees in the health sector (60.6%), followed by employees in education sector (54.02%). Almost half of the respondents believe that vaccination should be mandatory for residents over the age of 50, who are most at risk in case of infection with the SARS-CoV-2 virus.

If we look at the opinions of respondents in terms of whether they have recovered from COVID-19 and / or were vaccinated against COVID-19, we see differences mainly between the group of vaccinated (those who have recovered from COVID-19 and were vaccinated and those who have not recover from COVID-19 and are vaccinated) and the unvaccinated group (those who have recovered from COVID-19 and are not vaccinated and those who have not recovered from COVID-19 and are not vaccinated). A polarization between these two groups is shown according to vaccination status. The vaccinated group supports the introduction of vaccination to a much greater extent for all categories listed in Figure 15.

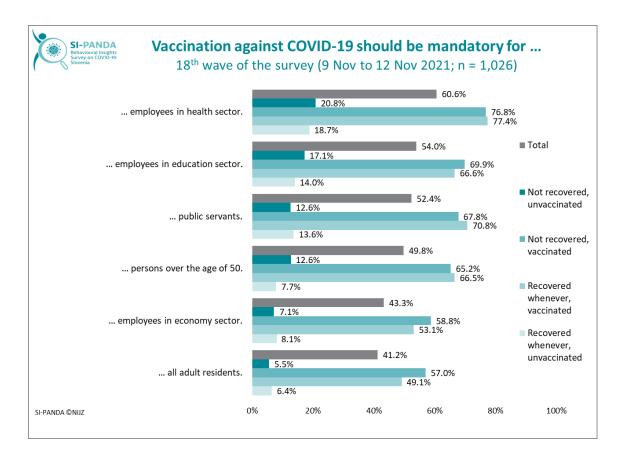


Figure 15: Supporting the mandatory vaccination against COVID-19 for employees in the listed fields of work or for all adult residents, total, by vaccination status, by recovery.

As expected, a much higher share of respondents who meet the RV condition (53.7%) compared to those who do not (5.4%) believes that vaccination against COVID-19 should be mandatory for all adult residents (Figure 16).

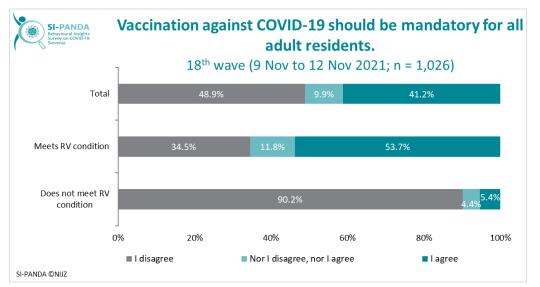


Figure 16: Supporting the mandatory vaccination against COVID-19 for all adult residents, total and by meeting the RV condition.

### Supporting the possible measures

In the 18<sup>th</sup> wave of the survey, respondents were also asked about their support for individual possible measures that could come into force in the event of a worsening of the epidemiological situation. In the largest share (57.4%), respondents would support the introduction of supervision over the implementation of at home quarantine and almost a half would support temporary tightening of measures to stop public life (Figure 17). Almost a quarter of respondents would support the restriction of outdoor movement between 10 p.m. and 5 a.m. The least support would be given to restriction of movement within municipalities (10.8%) as in all the previous waves of the survey. Respondents were asked about the same possible measures in the 10<sup>th</sup> wave of the survey (in early April 2021), when complete lockdown was in force in Slovenia; at that time, respondents were much more supportive of these possible measures.

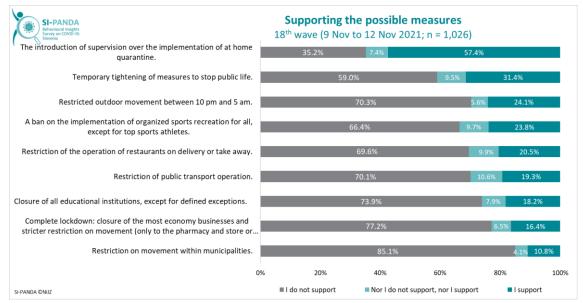


Figure 17: Supporting the possible measures, total.

Support for possible measures to curb the spread of the SARS-CoV-2 virus indicated in Figure 17 has increased compared to the previous wave of the survey, which can be attributed to the worsening of the epidemiological situation at the time of the survey. In the 18<sup>th</sup> wave of the survey, the introduction of supervision over the implementation of at home quarantine would be supported by 14.4 percentage points more respondents than in the 17<sup>th</sup> wave, and the temporary tightening of measures to stop public life would be supported by 15.7 percentage points more respondents than in the 17<sup>th</sup> wave of the survey (Figure 18).

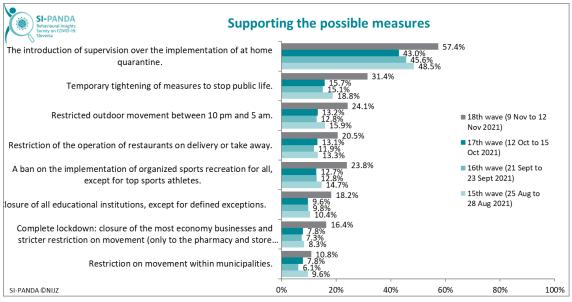


Figure 18: Supporting the possible measures, total and by survey waves.

## 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  $18^{th}$  wave is 5.3. This is followed by trust in hospitals with an average of 5.1 (Figure 19).

It is known that trust in the health profession and institutions in general is related to the decision to vaccinate, which is also shown by our data. There are significant differences in trust between vaccinated and unvaccinated respondents, while no specific differences in trust are observed with regard to mere recovering from COVID-19. It is interesting that unvaccinated people, regardless of whether they have recovered from COVID-19 or not, trust their employer to the greatest extent and only then their personal physician and hospital.

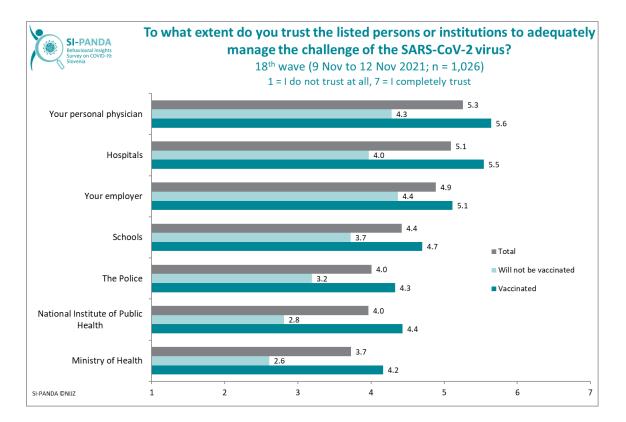


Figure 19: Trust in persons and institutions to manage the pandemic adequately, total and by vaccination rate.

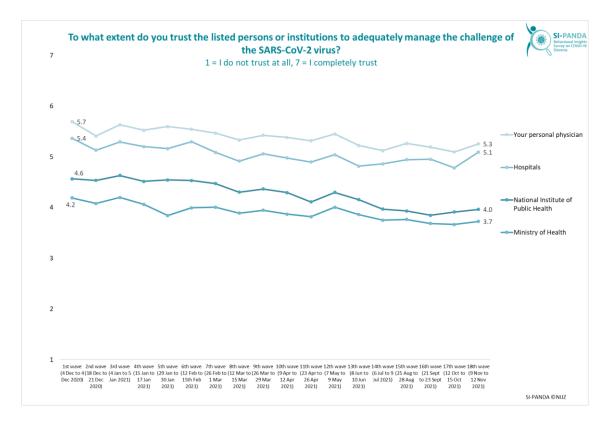


Figure 20: Trust in persons and institutions to manage the pandemic adequately, total and by survey waves.

Throughout the survey, trust in all the mentioned persons and institutions decreased, least of all in personal physicians and hospitals. Comparing to the first wave of the survey, trust decreased the most in NIJZ (from an average of 4.6 to 4.0). however, in the last wave of the survey, there is a noticeable increase in trust, especially in hospitals (Figure 20).

## Vaccination

Data from the 18<sup>th</sup> wave of the survey show that over 70% of respondents (aged between 18 and 74) have already been vaccinated with 54.2% of people already receiving two doses of the vaccine and 9.7% receiving one dose of the COVID-19 vaccine (Figure 21). 7.4% of respondents have already received the third (booster) dose of the vaccine. 23.4% of respondents in the 18<sup>th</sup> wave of the survey state that they do not intend to get vaccinated. 5.3% of respondents did not get vaccinated due to medical reasons. Throughout the survey women (27.4%) are less in favour of vaccination than men (19.7%) (Figure 21).

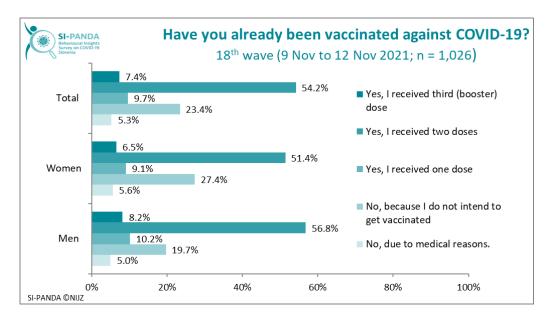


Figure 21: Vaccination against COVID-19, total and by gender.

The share of vaccinated persons (with one or two doses of COVID-19 vaccine) among the oldest group of respondents (65-74 years) already reached 84.2% and the share of vaccinated persons in the 50–64 age groups is 76.7% (Figure 22). The share of those who do not intend to be vaccinated is the highest in the two youngest age groups, in which a little less than one third of people share such an opinion.

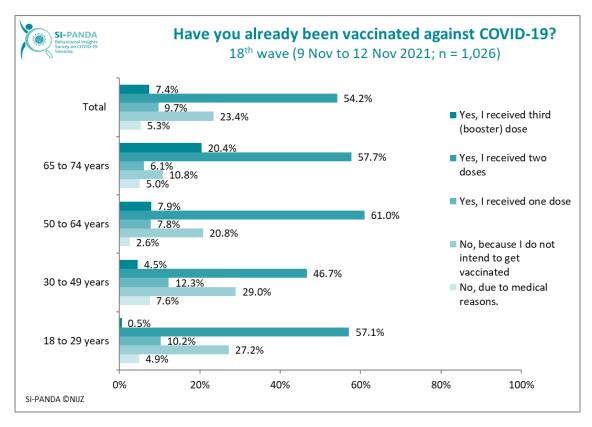
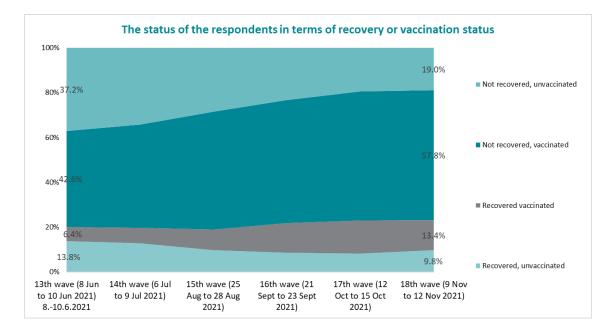


Figure 22: Vaccination against COVID-19, total and by age groups.

If we compare the last ten waves of the survey, we can see that the share of people who have already been vaccinated is increasing. However, in the 18<sup>th</sup> wave of the survey compared to the 17<sup>th</sup> wave, a smaller share of respondents who had already received both doses of vaccine (54.2% in the 18<sup>th</sup> wave; 59.8% in the 17<sup>th</sup> wave) has been detected and a higher share of people who received the third dose (7.4% in 18<sup>th</sup> wave; 1.3% in the 17<sup>th</sup> wave). After the 14<sup>th</sup> wave (when it reached its peak with 35.2% of such persons), the share of people who hesitate to vaccinate shows a gradual downward trend, but it has slowed down again in the last period.

If we look at the survey waves from the 13<sup>th</sup> wave onwards, we can see that the proportion of people who have not recovered from COVID-19 and have not been vaccinated against the SARS-CoV-2 virus is significantly decreasing. The share of these persons decreased by 18.2 percentage points in the 18<sup>th</sup> wave compared to the 13<sup>th</sup> wave. The share of people who have recovered from COVID-19 but have not been vaccinated has also decreased (by 4 percentage points compared to the 13<sup>th</sup> wave of the survey). However, the share of those who have been vaccinated is increasing both among those who have already recovered from COVID-19 (by 7 percentage points compared to the 13<sup>th</sup> wave of the survey) and among those who have not (by 15.2 percentage points compared to the 13<sup>th</sup> wave of the survey) and among those who have not (by 15.2 percentage points compared to the 13<sup>th</sup> wave of the survey) (Figure 23).

The largest share of vaccinated respondents in the 18<sup>th</sup> wave of the survey are those who have not yet recovered from COVID-19 (57.9%), and the lowest are those who were vaccinated and recovered from COVID-19 later (2.7%) (Figure 24). It is also indicated that those who recovered respondents and characterized the course of the disease as more severe, decided to get



vaccinated in a greater share after recovering from the infection, compared to those who characterized the course of the disease as mild.

Figure 23: The status of the respondents in terms of vaccination status or recovering from COVID-19, total and by survey waves.

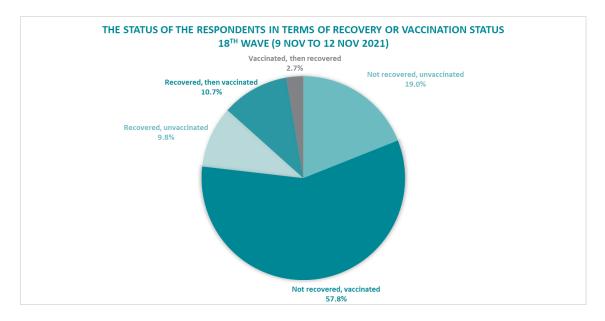
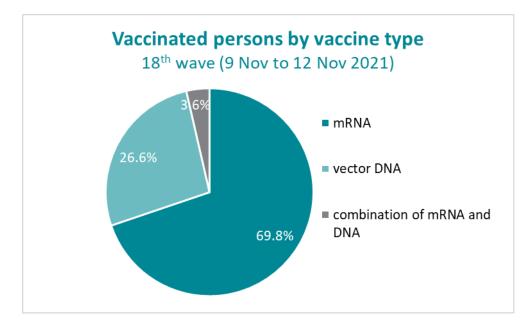


Figure 24: Vaccination and recovery status of the respondents.

The largest share of respondents (69.8%) in the 18<sup>th</sup> wave of the survey reported that they were vaccinated with mRNA vaccines, a good quarter were vaccinated with vector vaccines (26.6%) and 3.6% with a combination of vector and mRNA vaccines (Figure 25). Among the respondents who had received the mRNA vaccine, the vast majority (80.4%) did not recover from COVID-19, 16.5% recovered from COVID-19 and then received vaccine, and 3.0% were vaccinated and then recovered from the disease.



The largest share of those who were vaccinated and recovered from COVID-19 later (6.0%), were only vaccinated with vector vaccines.

In this wave of the survey, we also asked the respondents a few questions to determine the level of preparedness for vaccination against COVID-19 on a 7-point scale, or the level of rejection of it. Men in the oldest age group were the most prepared to vaccinate (average 5.1 on a 7-point scale), while the vaccination is mostly rejected by women in the 18–29 age group (average 3.5 on a 7-point scale) (Figure 26).

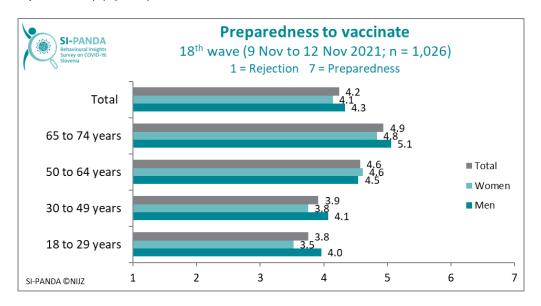


Figure 26: Preparedness to vaccinate against COVID-19, total, by gender and by age groups.

According to the last 6 waves of the survey, the level of preparedness to vaccinate is currently the highest in all age groups so far (Figure 27).

Stopnja pripravljenosti za cepljenje je sicer trenutno glede na zadnjih 6 valov raziskave najvišja do sedaj, v vseh starostnih skupinah ().

Figure 25: Vaccinated persons by COVID-19 vaccine type.

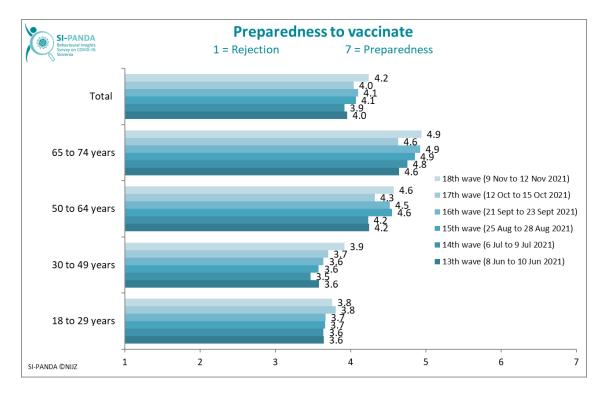


Figure 27: Preparedness to vaccinate against COVID-19, total, by age groups, 13th to 18th wave of the survey.

When asked what the decision to vaccinate depends / will depend on, respondents most agree on average that their decision to vaccinate depends / will depend on whether enough data is / will be available that the vaccine is safe (in the 18<sup>th</sup> wave, the average value on a 7-point scale is 4.6), whether sufficient data is / will be available on whether the vaccine is effective (4.5), and whether they can choose the type of vaccine themsleves (4.4) (Figure 28).

However, if we look at what the decision to vaccinate will depend on among those who have already been vaccinated, the main reason for the decision to vaccinate was whether higher vaccination rate will lead to the release of restriction on movement and socializing in groups while among those who are hesitant about vaccination, the decision on vaccination depends the most on whether there is sufficient data that the vaccine is safe (4.2 among the unvaccinated) (Figure 28). According to the results, releasing restrictions on movement and socializing in groups is less important for those who are hesitant about vaccination than for those who have already been vaccinated.

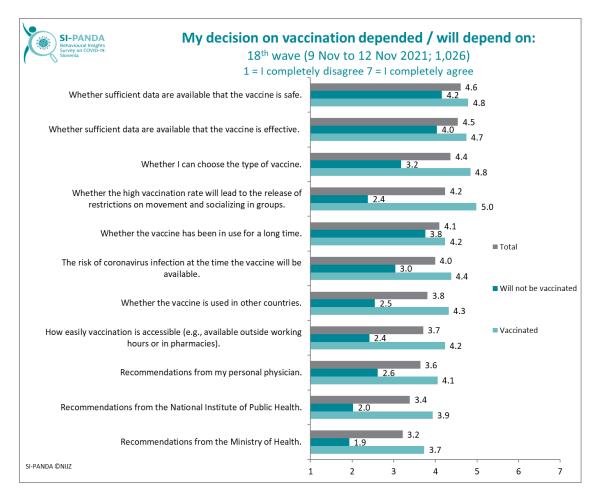


Figure 28: Reasons for the decisions to vaccinate, total and by vaccination rate.

In the 18<sup>th</sup> wave of the survey, we also asked the unvaccinated respondents for more detailed reasons why they do not intend to be vaccinated. Concerns about the side effects after vaccination, concern about long-term health effects, and opinion that vaccine is not safe. More than half of those respondents believe that too much pressure is being put on vaccination, which indicates that a possible introduction of mandatory vaccination would encounter even greater resistance in this group (Figure 29).

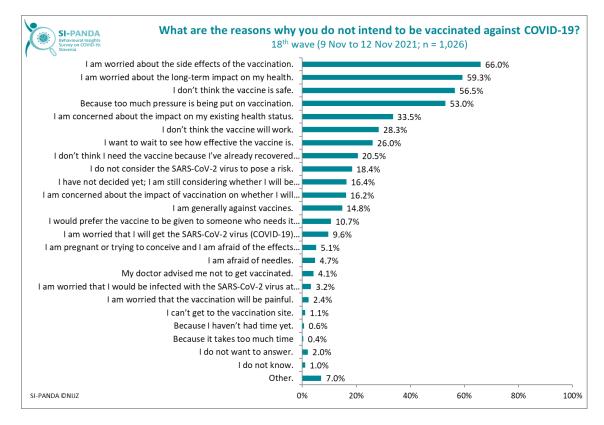


Figure 29: The reasons why respondents do not intend to vaccinate against COVID-19, total.

Respondents who have already been vaccinated reported that they decided to get vaccinated mainly to protect their own health (64.8%), to prevent a more severe course of the diseases or its consequences (62.2%) and to protect the health of their loved ones (60.5%) (Figure 30).

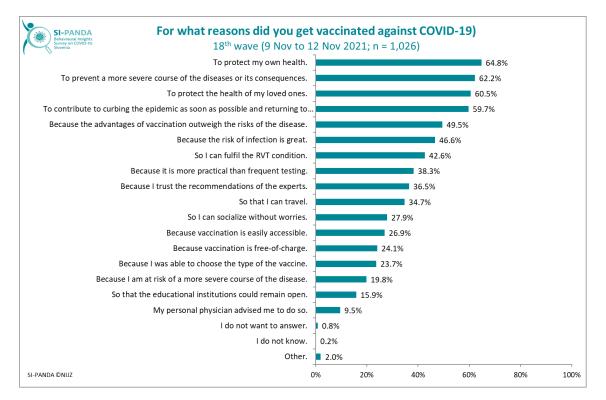


Figure 30: Reasons why the respondents decided to vaccinate, total.

## The impact of the pandemic on lifestyle and some other areas of life

In the 18<sup>th</sup> wave of the survey, 35.7% of respondents reported spending more time in front of a television, computer, or other electronic devices in the last 2 weeks than before the pandemic; a particularly high share of these persons was among the youngest respondents (aged 18 to 29), namely 43.2%. In this age group, the share decreased by 10.9 percentage points compared to the previous wave. As throughout the survey, the youngest age group of respondents reported in the highest share about other unhealthy lifestyle habits in the last 2 weeks. Thus, compared to other age groups, they were the least physically active (38.6%), ate more unhealthy food (28.0% of respondents aged 18 to 29), smoked more (18.2%) and drank more alcohol (18.8%) than before the pandemic (Figure 31).

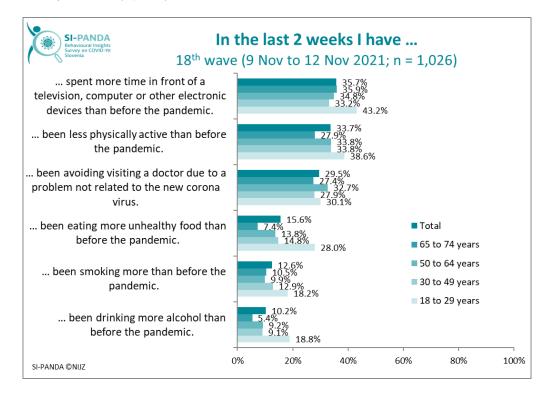


Figure 31: The impact of the pandemic on lifestyle in the past 2 weeks, total and by age groups.

In the 18<sup>th</sup> wave of the survey, respondents were also asked about the impact of the pandemic on individual areas of life. As expected, the largest share (56.4%) of people reported that the pandemic had a negative impact on their social contacts with extended family and friends, followed by a negative impact on financial security (33.3%) and on physical activity (deterioration was reported by 32.0% of respondents) (Figure 32). These shares are approximately the same as in the previous wave of the survey.

On the other hand, those who reported the positive impact of the pandemic, for the most part observed this impact in the area of physical activity and also in the area healthy nutrition and family relationships, which can be explained by the fact that they may have had more time for these activities and for their loved ones, because other activities, in which they would otherwise engage, were severely curtailed during the pandemic.

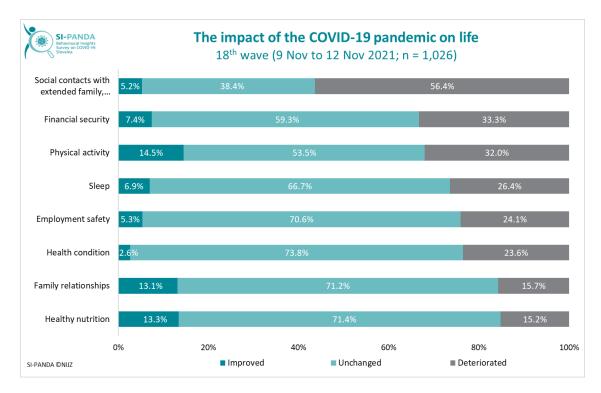


Figure 32: The impact of the COVID-19 pandemic on areas of life, total.

### **Experiencing stress**

In prolonged emergencies and uncertainties, such as an epidemic, the experience of stress usually increases, but there may also be an immediate adjustment, especially if the stressors remain at a similar, albeit higher, level or increase gradually<sup>5</sup>.

In the 18<sup>th</sup> wave of the survey, respondents were asked about how often they felt tense, stressed or under a lot of pressure in the last 14 days. A quarter of respondents (22.6%) experienced stress daily or often, most often in the age groups 18 to 29, and 30 to 49 where the share was 28 percent (Figure 33). The frequency of experiencing stress decreases with age and is the lowest in the oldest age group (65 to 74 years), namely 8.1%. However, the distribution of frequencies by age groups remains approximately the same in all survey waves.

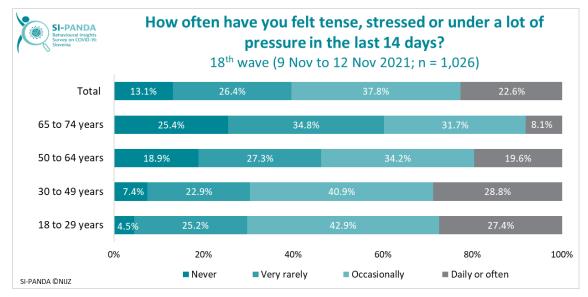
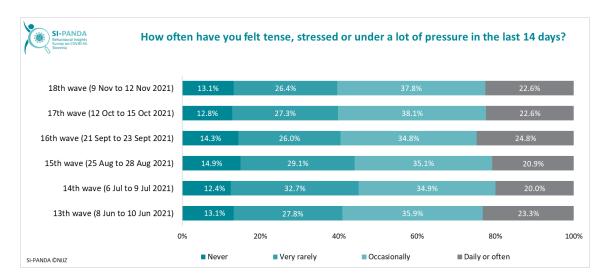


Figure 33: Frequency of experiencing stress in the last 14 days, total and by age groups.

If we look at experiencing stress through individual survey waves, we see that the share of people who experience stress daily or often is relatively stable and ranges from 20 to 24.8%. similar temporal consistency is seen in the shares of persons, which experience stress very rarely or never (Figure 34).

<sup>&</sup>lt;sup>5</sup> Fu S, Greco LM, Lennard AC in Dimotakis N. Anxiety responses to the unfolding COVID-19 crisis: Patterns of change in the experience of prolonged exposure to stressors. Journal of Applied Psychology 2021; 106(1): 48.





Respondents cited workload as the most common reason for stress in the last four waves of the survey (37.4% in the 18<sup>th</sup> wave). This is followed by concerns about untrue information about SARS-CoV-2 virus (36.3%) and concerns about the uncertain financial future (31.4%) (Figure 35).

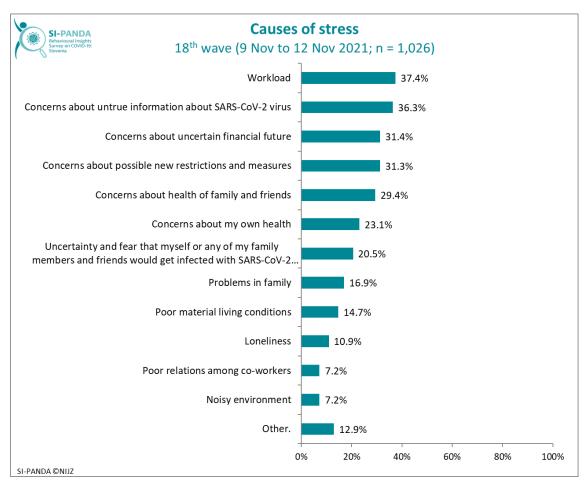


Figure 35: Causes of stress, total.

The biggest differences between the more and less educated in the causes of stress are in experiencing workloads and poor material living conditions. Respondents with higher educational attainment were more likely to experience stress due to workload and poor relationships with co-workers; respondents with secondary and lower education were more likely to experience stress due to poor material conditions compared to more educated.

Most respondents (81.7%) managed tensions, stress and pressure easily or with some effort, 14.7% had major problems, and 3.6% had severe problems or did not manage stress.

In the 18<sup>th</sup> wave of the survey, a good half of the respondents (50.8%) reported that they could always or often find a way to relax when they needed to, and 11.6% reported that this happened very rarely or never. In terms of mental health problems, those with signs of depressive disorder very rarely or never found a way to relax (34.9%), followed by those with mental health problems (13.5%) and those without mental health problems (5.9%) (Figure 36).

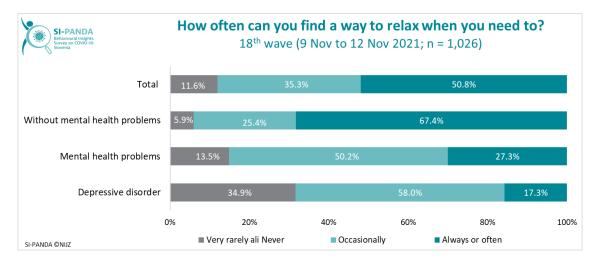


Figure 36: Frequency of relaxation, total and by mental health problems.

## 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, are increasingly finding that in some people, individual symptoms persist for months after the 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 is more common among hospitalized and elderly patients, but it also occurs in those who have overcome a milder form of the disease and also among young adults who did not have health problems before the infection<sup>6</sup>. 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>7</sup>

In the 18<sup>th</sup> wave of the survey, 23.2% of respondents report that they are or have been infected with the SARS-CoV-2 virus so far, of which 8.8% stated that their infection was asymptomatic, 68.4% report that the course of the disease was mild, in 21.0% the course of the disease was more severe, but did not require hospital treatment, and 1.8% had been treated in the hospital. Respondents who are or have been infected with SARS-CoV-2 virus so far were asked from the 11<sup>th</sup> wave onwards about possible problems after recovering from SARS-CoV-2 virus infection.

According to the WHO, a quarter of people who become infected with the SARS-CoV-2 virus have some health problems for at least one month after infection, and one in ten patients is thought to have some symptoms after 12 weeks<sup>8</sup>. Therefore, we were interested in whether the respondents who recovered from COVID-19 had or still have any of the symptoms shown below one month after recovering from SARS-CoV-2 virus infection (Figure 37).

We can find that in 18<sup>th</sup> wave most people (67.5%) still had some problems<sup>9</sup> one month after recovering from the infection. The most common problems were malaise, fatigue and lack of energy, reported by one third of recovered patients; a good quarter of respondents reported problems with the perception of taste and smell; almost a fifth reported problems with concentration and memory; and almost a fifth reported sleep disorders. Further they reported headaches, cough, muscle and joint pains, chest pains and shortness of breath, unpleasant feelings of fear, sadness, heart palpitations, digestive problems, etc. (Figure 37). In all eight waves of the survey, the average number of problems is the same (2 problems). 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.

<sup>&</sup>lt;sup>6</sup> Brackel, CLH, Lap, CR, Buddingh, EP, et al. Pediatric long-COVID: An overlooked phenomenon? Pediatric Pulmonology. 2021; 56: 2495–502. https://doi.org/10.1002/ppul.25521.

<sup>&</sup>lt;sup>7</sup> Nalbandian, A., Sehgal, K., Gupta, A. et al. Post-acute COVID-19 syndrome. Nat Med 27, 601–15 (2021). https://doi.org/10.1038/s41591-021-01283-z.

<sup>&</sup>lt;sup>8</sup> WHO Policy brief 39 In the wake of the pandemic, Preparing for Long COVID,

https://apps.who.int/iris/bitstream/handle/10665/339629/Policy-brief-39-1997-8073-eng.pdf.

 $<sup>^{\</sup>rm g}\,V$  18th wave of the survey, headache and cough were added to the possible answers.

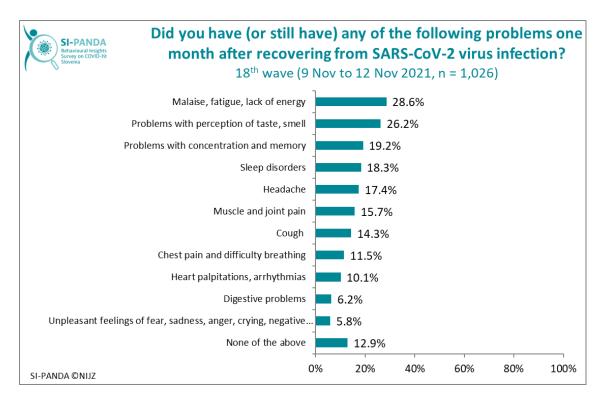


Figure 37: Health problems one month after the respondents had already recovered from SARS-CoV-2 virus infection, total.

Comparisons of the last waves show that the share of people with one problem has risen by around 10 percentage points from the 11<sup>th</sup> to the 15<sup>th</sup> wave, while in the 16<sup>th</sup> wave it dropped to the lowest share so far (47.6%), and in the wave has risen again in 17<sup>th</sup> and 16<sup>th</sup> wave and is currently 60.3% (Figure 38).

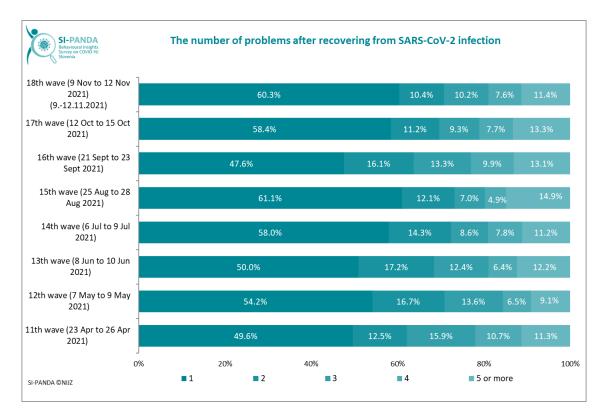
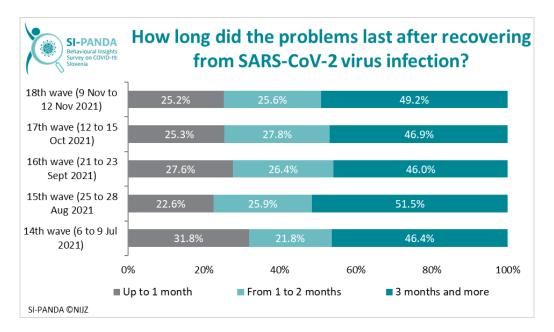


Figure 38: The number of problems after recovery from SARS-CoV-2 infection, total, by survey waves.

Surprisingly a large share of persons does not consult a doctor about problems after recovery from COVID-19. In the 18<sup>th</sup> wave, there were 72.4% of such respondents.

When asked how long the problems lasted after the recovery from infection, almost a half (49.2%) answered that 3 months and more, 25.6% answered that the problems lasted from 1 to 2 months and 25.2% answered that they lasted up to 1 month. If we look at the shares of responses by individual categories from the 14<sup>th</sup> wave of the survey onwards, we can see that they are constant (Figure 39). Most respondents (73.5%) answered that the problems affected their work, caring for things at home and relationships with people; 20.7% reported that the problems had a great or an extreme impact on work, care for the home and relationships with people. These persons also consulted a doctor about these problems in the highest share. A quarter of recovered respondents (26.5%) reported that the problems did not affect their daily functioning.





Given this, it can be assumed that these are, on the one hand, mild and non-specific health problems, but on the other hand, it is often a rather complex picture, to which the profession is currently not paying enough attention, namely from research and from clinical point of view. There is a lack of clear guidelines for the treatment of people with long COVID and their systematic monitoring.

Much is still unknown about the causes and long-term effects of SARS-CoV-2 infection on humans, but research is underway. It is already clear that long COVID is relatively common and has a significant impact on an individual's ability to work and their daily life. All this can have economic consequences for the individual, their family and society. 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. Patient registries and other types of epidemiological surveillance of long COVID, as well as cohort and other research, are also being established.

Most people with COVID-19 recover quickly. Given that research shows that the risk of long-term health problems after infection with the SARS-CoV-2 virus is not so small, vaccination against COVID-19 is also important in this regard and probably not mentioned enough in the communication about the benefits of vaccination.

# Highlighted topic of the 18<sup>th</sup> wave of the survey:

## Mental well-being and mental health problems

The COVID-19 pandemic and the worsening financial situation have also had a significant impact on people's mental health and created new obstacles for those who already had mental disorders. Since the beginning of the COVID-19 pandemic, in Slovenia, as well as in other countries, we have noticed a deterioration in mental health well-being and a higher frequency of mental health problems in many population groups<sup>10</sup>. We paid special attention to mental health in the 8<sup>th</sup>, 14<sup>th</sup> and 18<sup>th</sup> wave of the survey. After a year and a half of the presence of the virus in our society, mental well-being has deteriorated and the incidence of mental health problems (e.g. experiencing anxiety or depressive symptoms) is significantly higher than it was before the epidemic<sup>11</sup>. In this chapter, we present an assessment of mental well-being and the presence of mental health problems among adult residents of Slovenia.

#### Mental well-being

Mental well-being of residents was measured in all 18 waves of the survey. We used the WHO-5 questionnaire, which asks about the frequency of experiencing pleasant emotions in the last 2 weeks. The overall average of mental well-being in the 18<sup>th</sup> wave was 55.5 (out of 100), the older two groups of respondents – from 50 to 74 years old – rated their mental well-being better compared to the younger two groups of respondents – from 18 to 49 years old (Figure 40). Women rated their mental well-being worse than men (Figure 41). Even in foreign research, worse mental well—being is noted in women and in younger adults<sup>12</sup>. Those with chronic illnesses and those whose financial situation worsened during the pandemic in the last 3 months have worse mental well-being.

From the 1<sup>st</sup> (December 2020) to the 8<sup>th</sup> wave (April 2021) of the survey, the mental well-being of the residents improved, reaching its highest value in the 12<sup>th</sup> wave of the survey – 62.1 (out of 100). From 12<sup>th</sup> (May 2021) to 18<sup>th</sup> wave (November 2021) of the survey, however, the mental well-being worsened in all age groups and both sexes. Similar deterioration in mental well-being is also noted by foreign research, namely during the period of lockdown and especially in persons with a history of treatment for mental disorders<sup>13</sup>.

<sup>&</sup>lt;sup>10</sup> Santomauro DF, Mantilla Herrera AM, Shadid J, Zheng P, Ashbaugh C, Pigott DM, et al. Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. Lancet. 2021; 398(10312): 1700–12.

<sup>&</sup>lt;sup>11</sup> Gabrijelčič Blenkuš idr. (ur.). Neenakosti v zdravju - izziv prihodnosti v medsektorskem povezovanju. Ljubljana, Slovenija: NIJZ; 2021. Dostopno na: https://www.nijz.si/sites/www.nijz.si/files/publikacije-datoteke/neenakosti\_e\_verzija.pdf.

<sup>&</sup>lt;sup>12</sup> Dale, R., Budimir, S., Probst, T., Stippl, P. in Pieh, C. (2021). Mental Health during the COVID-19 Lockdown over the Christmas Period in Austria and the Effects of Sociodemographic and Lifestyle Factors. *International journal of environmental research and public health*, 18(7), 3679. f

<sup>&</sup>lt;sup>13</sup> Simon, J., Helter, T. M., White, R. G., van der Boor, C. in Łaszewska, A. (2021). Impacts of the Covid-19 lockdown and relevant vulnerabilities on capability well-being, mental health and social support: an Austrian survey study. *BMC public health*, 21(1), 314.

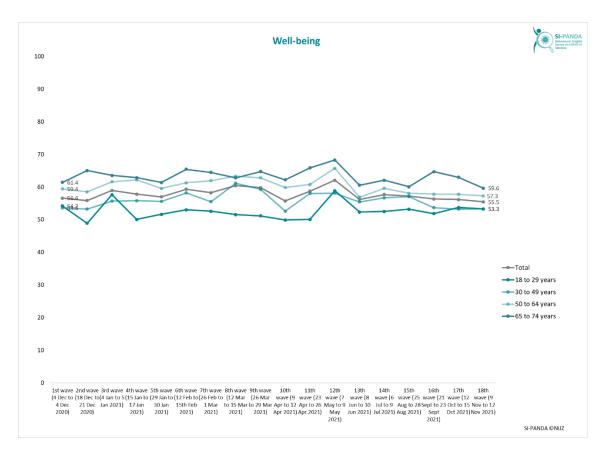


Figure 40: Well-being, total, by age groups and by survey waves.

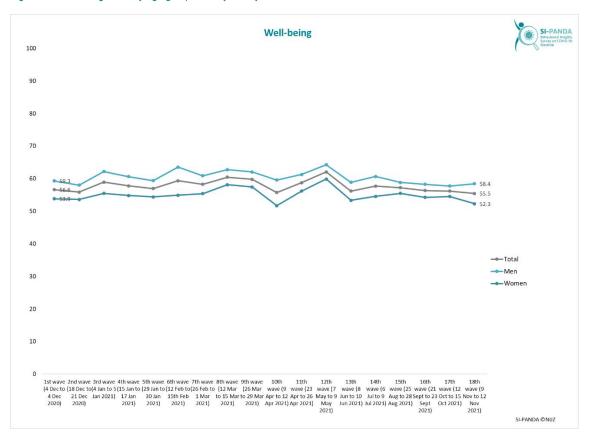


Figure 41: Well-being, total, by gender and by survey waves.

Based on the mental well-being questionnaire, we divided the participants into three groups according to the predicted risk of mental problems: a group with an increased risk of developing a depressive disorder, a group with an increased risk of mental health problems, and those without mental health problems. The share of people with a depressive disorder or mental health problem was higher in all waves in women and respondents aged 18 to 29 years, and decreased toward the 65 to 74 age group (Figure 42). From 12<sup>th</sup> to 18<sup>th</sup> wave of the survey, the share of residents with a depressive disorder or mental health problem increased, especially among those with a chronic illness and those whose financial situation worsened during the pandemic.

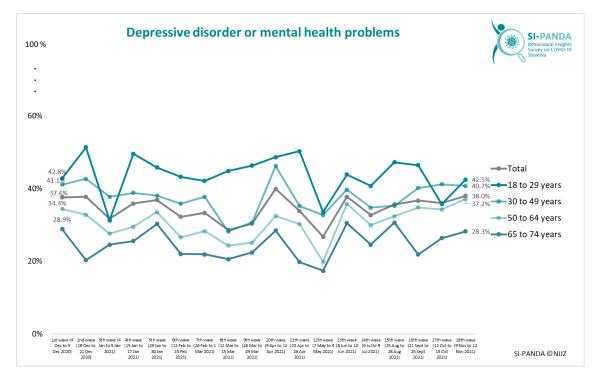
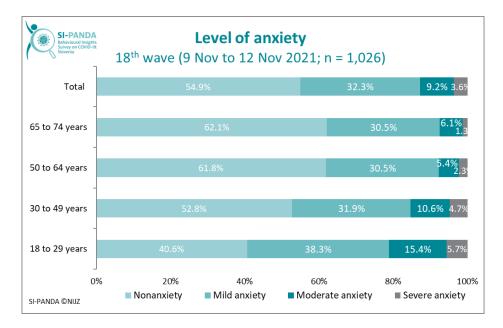


Figure 42: The occurrence of depressive disorder or mental health problems, total, by age groups and by survey waves.

#### Symptoms of anxiety and depression

In the 18<sup>th</sup> wave of the survey, the presence of symptoms of anxiety and depressive disorders was checked again (previously this was checked in the 14<sup>th</sup> wave of the survey). We used two questionnaires that ask about experiencing various problems in the past two weeks.

Anxiety is an unpleasant, fear-like emotional state. People with an anxiety disorder are characterized by anxiety to the extent that it interferes with their daily functioning. Feelings of anxiety, irritability, excessive worry and tension may be associated. 12.8% of respondents experience symptoms of moderate or severe anxiety (Figure 43). This group of residents is exposed to greater risk of developing an anxiety disorder or it may already be present in them. Mental disorders are diagnosed by trained professionals based on a procedure that cannot be adequately replicated in survey research such as SI-PANDA. That is why we are talking about the risk of developing an anxiety disorder, bearing in mind that the share presented also includes individuals who have already been diagnosed with the disorder or would be diagnosed by qualified professionals.



#### Figure 43: Level of anxiety, total and by age groups.

The share of people exposed to an increased risk of an anxiety disorder is the highest among young adults, which is consistent with findings from abroad<sup>14</sup>. In the age group from 18 to 29 years, there are 21.1% of such persons, and then the share decreases to the age group from 65 to 74 years, where 7.4% of persons face symptoms of moderate or severe anxiety (Figure 44).

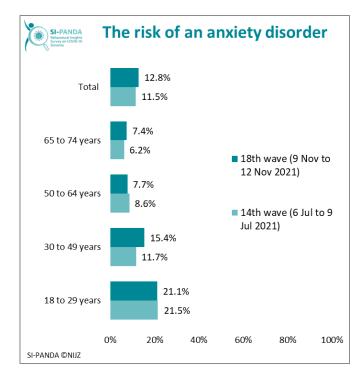


Figure 44: The risk of an anxiety disorder, total and by age groups, 14th and 18th wave of the survey.

The share of persons experiencing symptoms of moderate or severe anxiety is slightly higher in the 18<sup>th</sup> wave of the survey than in the 14<sup>th</sup> wave, which may be the result of a worse epidemiological situation. The risk of an anxiety disorder increased the most in persons aged 30

<sup>&</sup>lt;sup>14</sup> Fancourt, D., Bu, F., Mak, H. W., Paul, E., & Steptoe, A. (2021). COVID-19 social study. Results release, 40.

to 49 years. The share of those exposed to a higher risk is higher in women (13.9%) compared to men (11.8%), but a greater difference can be observed in men between the 18<sup>th</sup> and 14<sup>th</sup> waves, when the share in men was 8.6% (for women, the share of exposed to a higher risk of anxiety disorder in the 14<sup>th</sup> wave was 14.6%).

The share of people without symptoms of anxiety (nonanxiety) in the 18<sup>th</sup> wave is 54.9% and is lower compared to the 14<sup>th</sup> wave, when it was 66.4% (Figure 45). The share decreased between the two waves in all age groups and in both genders. In accordance with the findings of the SI-PANDA research, the research in Great Britain<sup>3</sup> also reports the maintenance of differences between age groups and genders in the level of anxiety during the different waves of the pandemic.

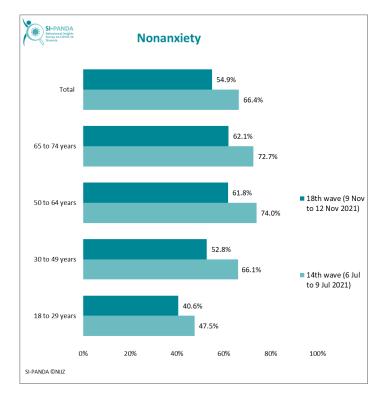


Figure 45: Nonanxiety, total and by age groups, 14<sup>th</sup> and 18<sup>th</sup> wave of the survey.

Depression is characterized by a combination of mental (e.g. memory problems, concentration), emotional (e.g. listlessness, hopelessness), behavioural (e.g. lack of interests in hobbies) and physical symptoms (e.g. feeling of suffocation). We speak of a depressive disorder when a person experiences symptoms of depression for at least two weeks and their daily functioning is hindered by them.

The share of people who faced symptoms of depression in the 18<sup>th</sup> wave of the survey is 14.9% (Figure 46). Of these, 8.2% were characterized by symptoms of major depression, while the share of persons with individual symptoms of depression was 6.8%.

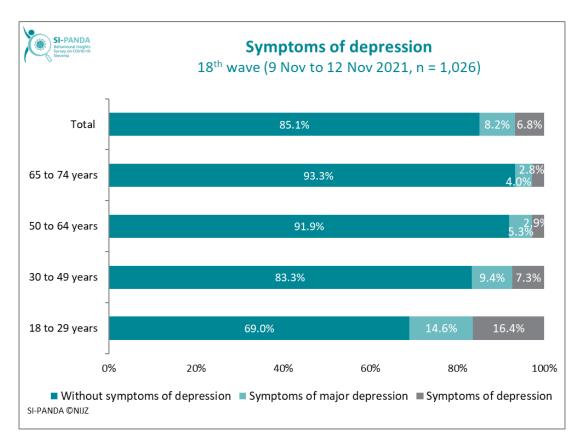


Figure 46: Symptoms of depression, total and by age groups.

Symptoms of major depression were present in the highest share among younger residents aged 18 to 29 - 14.6% (Figure 46) and among people who estimate that their financial situation is currently worse than it was before - 14.7% (Figure 47). In a comparable study from Great Britain<sup>3</sup>, they found that the level of depression is highest among young adults, as well as among people with lower incomes.

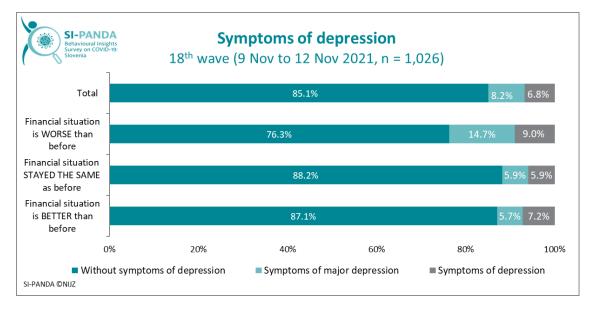


Figure 47: Symptoms of depression, total and by perception of the financial situation in the last three months.

The share of people with depressive symptoms was slightly higher in the 18<sup>th</sup> wave of the survey than in the 14<sup>th</sup> wave, except for residents aged 50 to 64, where the share of people with symptoms of depression was slightly lower in the 18<sup>th</sup> wave compared to the 14<sup>th</sup> wave (Figure 48).

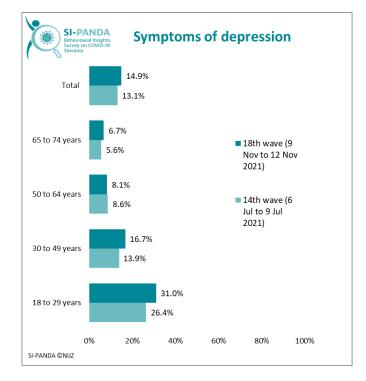


Figure 48: Symptoms of depression, total and by age groups, 14<sup>th</sup> and 18<sup>th</sup> wave of the survey.

#### Seeking help

When faced with mental distress, individuals seek help from within their family or friends, or seek professional help from a mental health specialist, doctor or nurse.

In the last 12 months, 5.4% of respondents sought professional help due to mental distress, where more women (6.6%) than men (4.4%) sought help. The share of people who sought professional help due to mental distress is the highest among younger residents. In the age group from 18 to 29 years old, 8.2% of respondents sought professional help, and then the share declines to the age group from 64 to 74 years old, where it amounts to 1.4%.

# Experiencing the COVID-19 pandemic, the impact of the pandemic on perceived cognitive changes and social support during the pandemic

In this wave of the survey, as in the 10<sup>th</sup> and 13<sup>th</sup> waves of the survey, the respondents were asked to answer a set of six questions that are included in the Pandemic Fatigue Scale (PFS)<sup>15</sup>.

Similar to the 10<sup>th</sup> wave of the survey, the respondents are primarily tired of discussions about COVID-19 in the media – this fatigue was expressed this time by almost 62.4% of the respondents (in the 10<sup>th</sup> wave of the survey 68.7%), and almost 40 percent of people state that it gets on their nerves if they hear anything about COVID-19 (Figure 49). A fifth of people are losing their will to fight against COVID-19 – the share of these people has decreased by 16.6 percentage points compared to the 10th wave of the survey

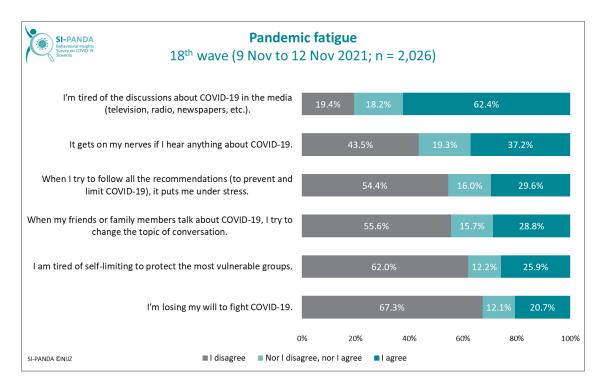


Figure 49: Pandemic fatigue, total.

<sup>&</sup>lt;sup>15</sup> For the purposes of measuring pandemic fatigue in the narrower sense of the word, foreign researchers developed the Pandemic Fatigue Scale (PFS) and confirmed the causal relationship between pandemic fatigue and four important protective measures: physical distance, maintenance of personal hygiene, use of masks and search for information. (Lilleholt, Lau, Ingo Zettler, Cornelia Betsch, and Robert Böhm. 2020. "Pandemic Fatigue: Measurement, Correlates, and Consequences." PsyArXiv. December 17.).

According to the results, the youngest respondents experience the greatest pandemic fatigue, women more than men (Figure 50). Pandemic fatigue decreased in all age groups compared to the 13<sup>th</sup> wave of the survey, and especially compared to the 10<sup>th</sup> wave of the survey (Figure 51).

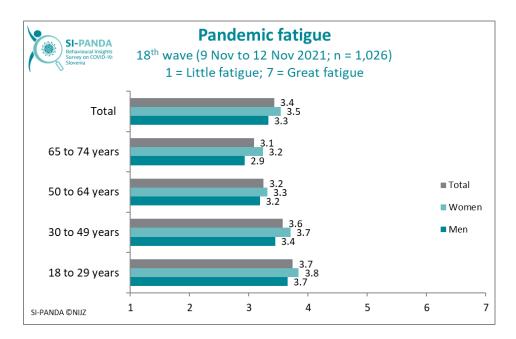


Figure 50: Pandemic fatigue, total, by age groups and by gender.

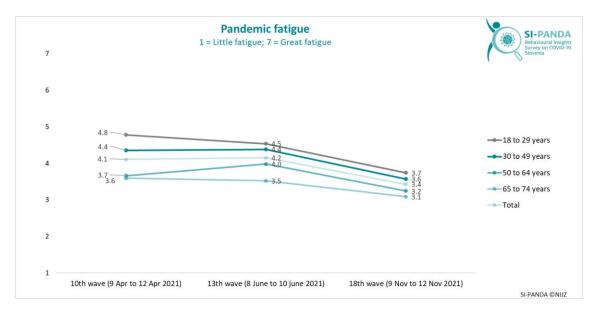


Figure 51: Pandemic fatigue, total, by age groups and by survey waves.

#### The impact of the pandemic on perceived cognitive changes

It is well known that during health crises, such as the COVID-19 pandemic, the emotional experience is more intense, which may also be reflected in altered cognitive functioning. In the  $10^{th}$  wave of the survey, we included a questionnaire on perceived cognitive changes (PCC). The questionnaire consists of four questions, which refer to everyday situations and activities in which cognitive abilities are inevitably involved, and which are easy for respondents to understand, e.g. problems with concentration, memorization, focus and switching between different mental activities. Respondents answered questions about self-assessment of mental abilities during the COVID-19 pandemic compared to the period before the pandemic on a 7-point scale (1 – much easier than before, 2 – easier than before, 3 – somewhat easier than before, 4 – the same as before, 5 – slightly harder than before, 6 – harder than before, and 7 – much harder than before).

The results of the 10<sup>th</sup> wave of the survey showed that almost a quarter of respondents (23%) estimated that their mental abilities had deteriorated during the pandemic compared to the period before it. Self-reported cognitive decline was greater in secondary school and university students and those who had worked at their workplaces in the last seven days before the survey. A greater decline in cognitive abilities during the pandemic was reported by those who had chronic diseases and more symptoms of poorer mental health, as well as those who had a worse lifestyle during the pandemic than before it (they were less physically active, consumed more unhealthy food, they smoked more). The greatest self-reported cognitive decline was detected in respondents who were infected with SARS-CoV-2 virus and had a more severe course of the disease.

In order to find out how the duration of the COVID-19 pandemic affects perceived cognitive abilities, we included the PCC questionnaire also in the  $18^{th}$  wave of the survey. The results of PCC from the  $18^{th}$  wave of the survey are shown in Table 1. On average, the self-assessment of cognitive abilities was 4.14, which means that he respondents reported a significant decline in cognitive abilities. The results showed significant differences by gender: on average, the self-assessment of cognitive abilities was 4.11 for men and 4.17 for women (p = .03). on average, therefore, women reported greater cognitive decline during the COVID-19 pandemic than men.

The differences in perceived cognitive abilities are also shown according to the age of the respondents. The oldest persons reported the smallest decline in cognitive abilities (4.09), and the youngest age group reported the largest (4.16), but the differences were not statistically significant (Figure 52). In terms of educational attainment, more problems with cognitive functioning were reported by respondents with a secondary education or less (4.15) compared to respondents with higher education or more (4.13).

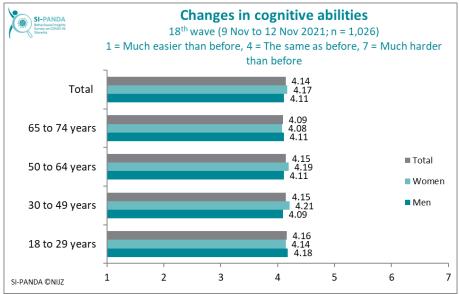


Figure 52: Changes in cognitive abilities, total, by age groups and by gender.

According to the employment status of the respondents, the most problems in cognitive functioning were reported by secondary school and university students (4.20) and the unemployed (4.19), while the least problems were reported by employed people (4.13) and retired people (4.13). it should be also noted here that the respondents differed in their self-assessment of cognitive functioning according to the way they were employed: the greatest cognitive decline was reported by those whose work was hybrid – from home and at their workplace (4.19, and the least by those who regularly went to work at their workplace (4.11).

Significant differences in self-assessment were also shown according to self-assessed social class: the greatest cognitive decline was reported by those from the lowest class (4.25) (10% of the respondents), and the smallest by those from the upper social class (3.90) (14% of the respondents) (Table 1). On average, the latter even reported an improvement in mental functioning during the COVID-19 pandemic.

Variable	18 <sup>th</sup> wave PCC:M
Gender (p = .0308)	
Men	4.11
Women	4.17
Age groups (p = .49)	
18 to 29 years	4.16

Table 1: Demographic variables and comparison of achievement on the Perceived Cognitive Change Scale (PCC) in different subgroups, 18<sup>th</sup> wave of the survey.

30 to 49 years	4.15
50 to 64 years	4.15
65 to 74 years	4.09
Educational attainment (p = .45)	
Secondary education	4.15
Higher school education or more	4.13
Social class (p = .0000)	
Lower	4.25
Middle	4.14
Upper middle	4.09
Upper	3.90
Employment status (p = .49)	
Employed	4.13
Secondary school, university student	4.20
Retired	4.13
Unemployed	4.19
Work in the last 7 days (p = .000000)	
Home	4.13
Hybrid	4.19
At workplace	4.11
Living environment (p = .78)	
Rural	4.15
Suburban	4.14
Urban	4.13
Living arrangement (p = .51)	
I do not live alone	4.14
I live alone	4.17
Financial situation (p = .0000)	
Better than before	4.14
Stayed the same	4.12
Worse than before	4.19
Chronic condition (p = .000000)	
Yes	4.20
No	4.12
Mental health problems (p = .000000)	
Depressive disorder	4.46
Mental health problems	4.20
Without mental health problems	4.05

The results of the survey also show that the self-assessment of cognitive functioning was also influenced by the financial situation in the last 3 months. As expected, the most problems with cognitive functioning were self-assessed by those whose financial situation has worsened in the last 3 months (4.19) (26% of the respondents), the least problems in the cognitive field were reported by respondents whose financial situation had stayed the same in the last 3 months (4.12) (67% of the respondents).

The results did not show any differences regarding the living environment of the respondents. However, there are large differences in the self-assessment of cognitive functioning between those who live alone compared to those who live with others (4.17 vs 4.14)

Regarding the health status of respondents, we had only a few questions available in the 18<sup>th</sup> wave of the survey.

A greater decline in mental abilities was reported by those with chronic illnesses (4.20) (21% of respondents) than those without chronic illnesses (4.12). The results showed that the greatest cognitive decline was also reported by those who also reported mental health problems: those with mental health problems had an average score of 4.20, and those with a depressive disorder had an even higher score of 4.46 (14% of respondents), compared to those who did not report mental health problems (4.05).

#### Conclusion

Similar to the results of the 10<sup>th</sup> wave of the survey, the results of the 18<sup>th</sup> wave also indicate interdependence between various demographic factors and self-reported perception of changes in cognitive functioning (e.g. gender, social class, living conditions, employment status, and also the manner of working). However, the results from the 18<sup>th</sup> wave showed that respondents from the highest social class even reported an improvement in cognitive functioning during the COVID-19 pandemic compared to the period before it. The results also show a link between the presence of chronic diseases and mental health problems (e.g. depression) with changes in cognitive functioning in a longer-lasting crisis situation, on which individuals have no major influence. Results from the 18<sup>th</sup> wave of the survey are quite similar to the results from the 10<sup>th</sup> wave. Proving whether the results are similar or statistically different, however, will require in-depth statistical analysis.

Even in Slovenia, there are signs of pandemic fatigue among people, which is especially present in the youngest age group. A significant share of people are stressed by following the many changing recommendations and instructions to manage the COVID-19 pandemic, the topic of COVID-19 makes them nervous and some of them even lose the will to fight against COVID-19. This probably also leads to (conscious or subconscious) poor adherence to recommendations and poor protective behaviour of people, which complicates the efforts of the health profession to improve the epidemiological situation.

### The role of social support during the COVID-19 pandemic

Social support plays an important role in facing and overcoming crisis situations, such as the COVID-19 pandemic. It can act as a safeguard against the appearance of various problems, especially mental health problems. Several studies conducted during the COVID-19 pandemic have shown that social support has proven to be a protective factor against the negative effects of adversity in mental and physical health.

In order to find out what role social support plays in Slovenia, we also included a questionnaire for self-assessment of social support (MOS questionnaire) in the 18<sup>th</sup> wave of the survey. This

questionnaire includes questions related to positive social interaction, affection, attachment, and emotional and informational support. Respondents answered questions about social support during the pandemic on a 5-point scale: (1) Never, (2) Rarely, (3) Occasionally, (4) Often), and (5) Always.

The results of the self-assessment of social support are shown in Table 2. The results show that the average self-assessment of social support is 4.16, which means that on average the respondents answered that they often receive social support. A slightly higher rating of social support was given by women (4.20 compared to men (4.11), but there are no significant differences between men and women. Regarding the age structure, the survey showed that respondents in the 50 to 64 age group have the highest self-assessed social support (4.20), while the youngest participants have the lowest (4.08).

Higher social support is also reported by those with higher education: those with secondary education have an estimated social support of 4.12, and those with higher education or more 4.20 (Figure 53), but the differences are not statistically significant.

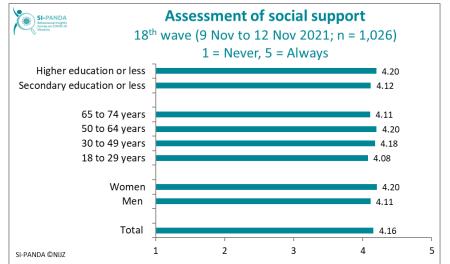


Figure 53: Assessment of social support, total, by gender, by age groups and by educational attainment.

According to employment status, the results show that the employed have the highest social support (4.24), and the unemployed have the lowest (3.74).

Differences in social support were also evident according to the living environment of the respondents: the highest social support was reported by those living in a suburban environment (4.24), and the lowest by those living in a rural environment (4.09).

Table 2: Demographic variables and the comparison of achievements on the social support scale (MOS) in different subgroups, 18<sup>th</sup> wave of the survey.

Variable	18 <sup>th</sup> wave MOS: M
Gender (p = .12)	
Men	4.11
Women	4.20
Age groups (p = .48)	
18 to 29 years	4.08
30 to 49 years	4.18

50 to 64 years	4.20
65 to 74 years	4.11
Educational attainment (p = .15)	
Primary education	
Secondary education	4.12
Higher school education or more	4.20
Social class (p = .000001)	
Lower	3.64
Middle	4.19
Upper middle	4.36
Upper	4.57
Employment status (p = .003)	
Employed, self-employed	4.24
Secondary school or university student	4.05
Retired	4.08
Unemployed	3.74
Housewife	4.18
Work in the last 7 days (p = .000001)	
Home	4.24
Hybrid	4.21
At workplace	4.24
Living environment (p = .11)	
Rural	4.09
Suburban	4.24
Urban	4.18
Living arrangement (p = .000001)	
I do not live alone	4.23
l live alone	3.55
Financial situation (p = .000001)	
Better than before	4.39
The same as before	4.21
Worse than before	3.93
Chronic condition (p = .000001)	
Yes	4.08
No	4.19
Mental health problems (p = .000001)	
Depressive disorder	3.70
Mental health problems	3.99
Without mental health problems	4.32

The biggest difference regarding social support was found in relation to the living arrangements: those who live alone reported very low social support (3.55) compared to those who do not live alone (4.23).

Differences in social support were also evident regarding the change in financial situation during the COVID-19 pandemic compared to the situation before the pandemic: those who reported an

improvement in their financial situation during the pandemic reported more social support (4.39) than those whose financial situation worsened (3.93) (Figure 54).

People with a chronic illness reported lower social support (4.08) than people without it (4.19). also, people with mental health problems reported lower social support (3.99), especially those with symptoms of a depressive disorder (3.70), compared to those who did not report mental health problems (4.32) (Figure 54).

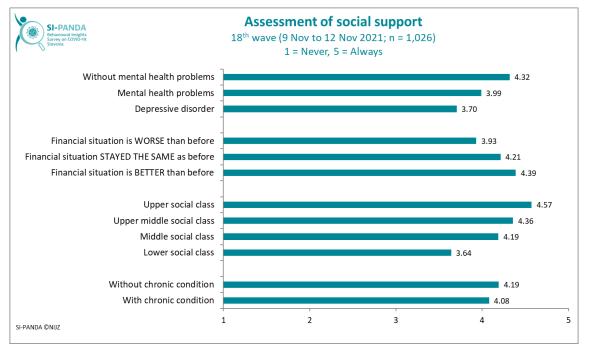


Figure 54: Assessment of social support according to the presence of chronic condition, social class, financial situation in the last 3 months and mental health problems.

The results of the answers to the MOS questionnaire show great differences between the respondents of the 18<sup>th</sup> wave of the survey. The worst social support was reported by the unemployed, respondents with chronic conditions and respondents with mental disorders, especially those with a depressive disorder, those from a lower social class, those living alone and those whose financial situation worsened in the last three months before the survey. Based on the above data, we cannot yet conclude anything more about the role of social support in dealing with the COVID-19 pandemic, or how social support is related to the negative effects of the COVID-19 pandemic. The results clearly show which groups of residents in Slovenia have poorer social support, which can also lead to poorer health outcomes. Therefore, responsible institutions and organizations should direct more efforts to try to improve their social support for these people even during the COVID-19 pandemic. If not in person due to the restrictive measures due to COVID-19, then at least virtually via all possible means of communication, from a simple telephone conversation to communication via various forms of social networks. Helping to improve social support and building social networks could undeniably help these people overcome everyday difficulties in the fight against COVID-19.



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