SI-PANDA
Behavioural Insights Survey on COVID-19: Slovenia

NIJZ 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), 15th wave

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KAZALO

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 at-risk 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[1], that countries regularly conduct qualitative and quantitative population surveys, which should serve as the basis for further action.

[1] 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 twenty-one replicates starting on 4 December 2020. The first part of the survey (up to and including the 12th 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)[2] 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 **15th wave** of the panel web survey, that took place **from 25 August 2021 to 28 August 2021** on a sample of 1,032 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:

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

[2] 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

SI-PANDA
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Indicator	1st wave (4 Dec to 6 Dec 2020) %	13th wave (8 Jun to 10 Jun 2021) %	15th wave (25 Aug to 28 Aug 2021) %
Testing in case of close contact with a COVID-19 positive person *(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	72.3
Vaccination rate *(the share of respondents who were vaccinated with at least one dose of COVID-19 vaccine)*	/	49.0	61.8
Hesitation regarding vaccination *(the share of respondents who do not intend to be vaccinated)*	/	32.1	35.3
Long COVID *(the share of respondents who reported at least one medical problem one month after the recovery from the infection)*	/	73.5	72.9
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	22.3
Physical activity *(the share of respondents who reported they were less physically active in the last 2 weeks than before the pandemic)*	44.8	32.6	27.1
Stress *(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	20.9
Mental health problems *(the share of respondents with depressive disorder or mental health problems)*	37.5	37.7	35.7
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	24.1	21.5

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. In the summer months, due to the more favourable epidemiological situation, we witnessed rather relaxed measures, as most of the daily tasks and activities were relaxed, considering preventive measures and the RVT condition. In the 15th wave of the survey, the largest support was given to the opening of theatres and cinemas under certain conditions (58.6%), more than a half of respondents also supported watching sporting events in person as well as live concerts, festivals, parties and other entertainment events in accordance with the RVT condition (Figure 1). The least support was given to the payable rapid testing and the use of masks on outdoor surfaces when it is not possible to maintain interpersonal distance of at least 2 metres (both 32.9%).

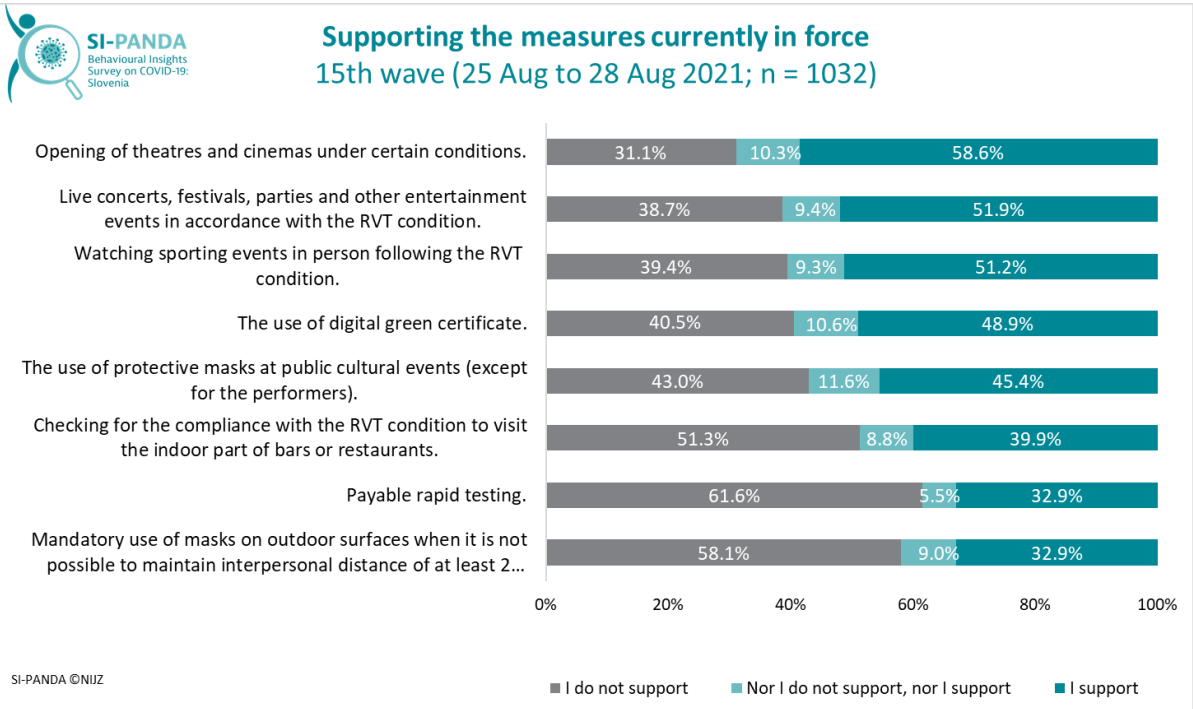

Figure 1: Supporting the measures currently in force, total.

In the 15th wave of the survey, 56.2% of respondents believed that measures related to SARS-CoV-2 virus unfairly limit the lives of some population groups more than others; the percentage is declining in the last three waves, which is probably connected with the more relaxed measures in summer months. 41.4% of the respondents believe that the measures infringe on our rights to an appropriate extent, given the current state of the pandemic; this percentage is also declining. More worrying is the fact that the share of respondents who believe that the population of Slovenia is following the measures to control the SARS-CoV-2 virus fell by 6.7 percentage points in the

15th wave compared to the 14th wave, and almost by 15 points compared to the 13th wave of the survey (Figure 2).

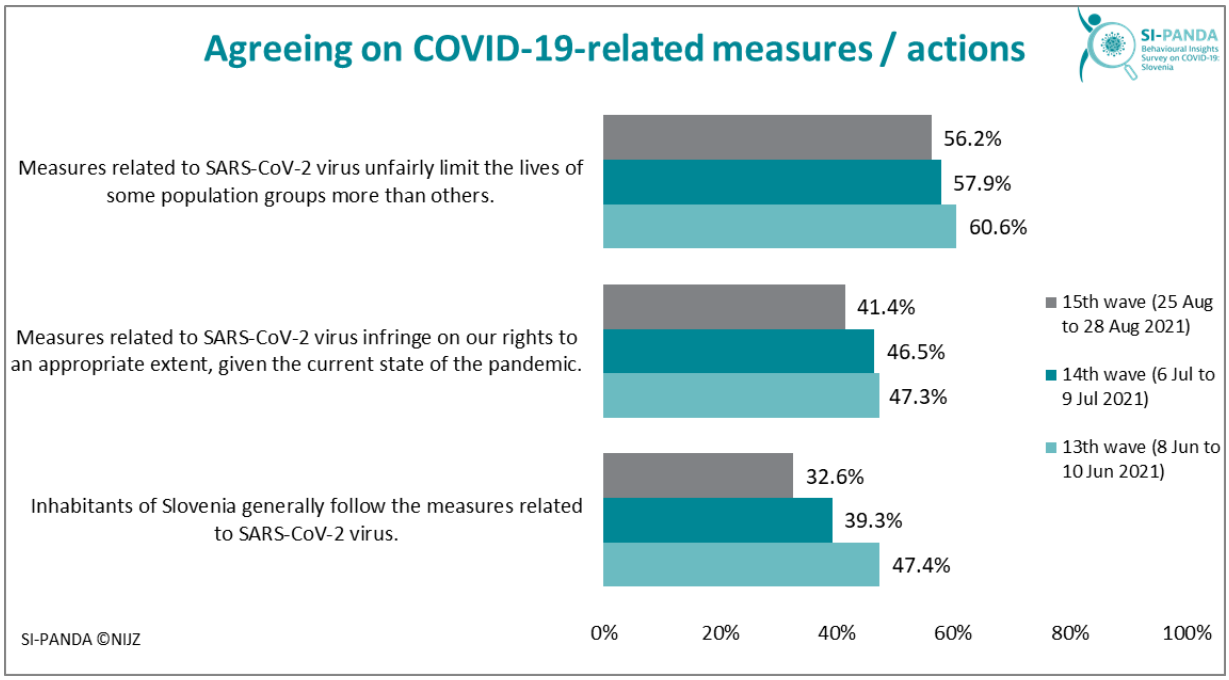

Figure 2: Opinions on COVID-19-related measures / actions, total, by survey waves.

Supporting the possible measures

In the 15th wave of the survey, we asked the respondents on the support of some possible measures that could come into force in the event of a worsening of the epidemiological situation. In the largest share (21.2%), respondents would support a ban on gathering people, unless they were close family members or members or a joint household, and in 10.4% they supported the closure of all educational institutions. Respondents were asked about the same possible measures in the 10th wave of the survey (in early April 2021), when the complete closure of the country was in force in Slovenia; at that time, respondents were much more supportive of these possible measures (Figure 3).

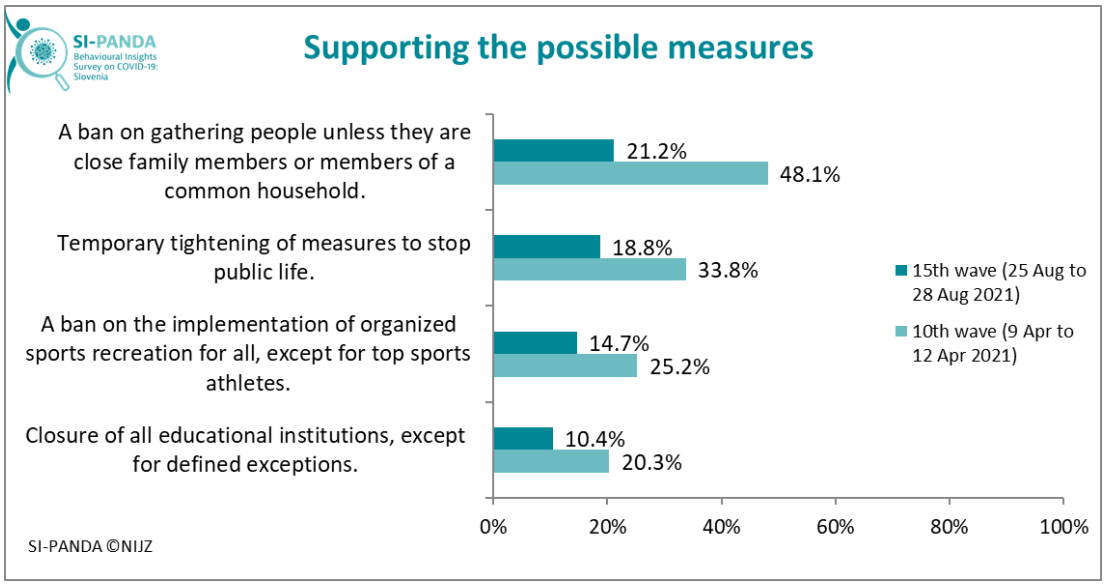

Figure 3: Supporting the possible measures, 10th and 15th waves of the survey, total.

In this wave of the survey, we also asked about the support of additional possible scenarios, most of which were already in force in previous waves of the pandemic. Respondents would give the least support to the restriction of movement to individual municipalities (9.6% of respondents) and the complete lock-down – the closure of most of the economy and stricter restrictions on movement (8.3% of respondents). Almost half (48.5%) of respondents would, however, support the introduction of supervision over the implementation of at home quarantine.

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 15th wave is 5.3. This is followed by trust in hospitals with an average of 4.9 and trust in employers with an average of 4.8. People who have already been vaccinated with two doses of COVID-19 vaccine, characteristically have more confidence in all the above institutions than those who will not be vaccinated (Figure 4).

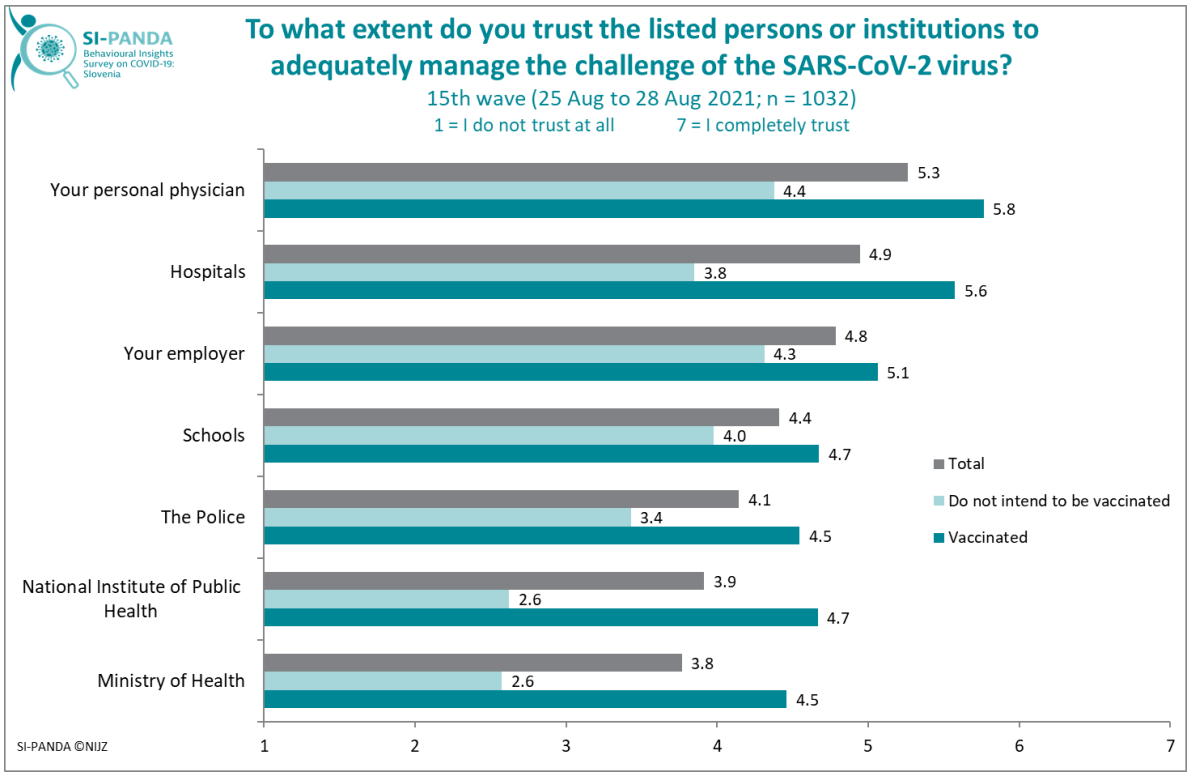

Figure 4: Trust in persons and institutions to manage the pandemic adequately, total and by vaccination rate.

Vaccination

Data from the 15th wave of the survey show that over 60% of respondents have already been vaccinated with 54.7% of people already receiving two doses of the vaccine and 7.1% receiving one dose of the COVID-19 vaccine, which is in line with the official data on the vaccination rate of the population of Slovenia aged 18 and over (Figure 5). The share of vaccinated persons (with one or two doses of COVID-19 vaccine) among the oldest age group of the respondents (from 65 to 74 years) is already 79.9% (Figure 6). 2.9% of the respondents stated that they had not yet been vaccinated because the vaccine was not yet available for them, and almost a third (29.1%) of the respondents in the 15th wave of the survey stated that they do not intend to be vaccinated. The share of those who do not intend to be vaccinated is the highest in the two youngest age groups, in which around 38% of people have such an opinion (Figure 6). Women (33.8%) are less in favour of vaccination than men (24.7%) (Figure 5).

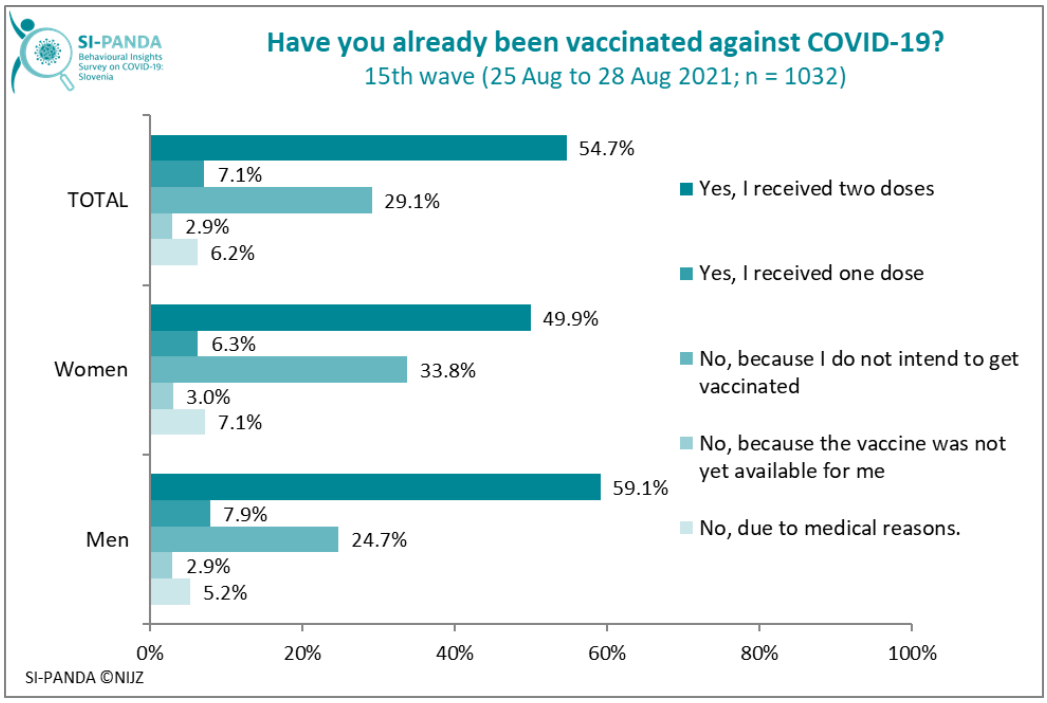

Figure 5: Vaccination against COVID-19, total and by gender.

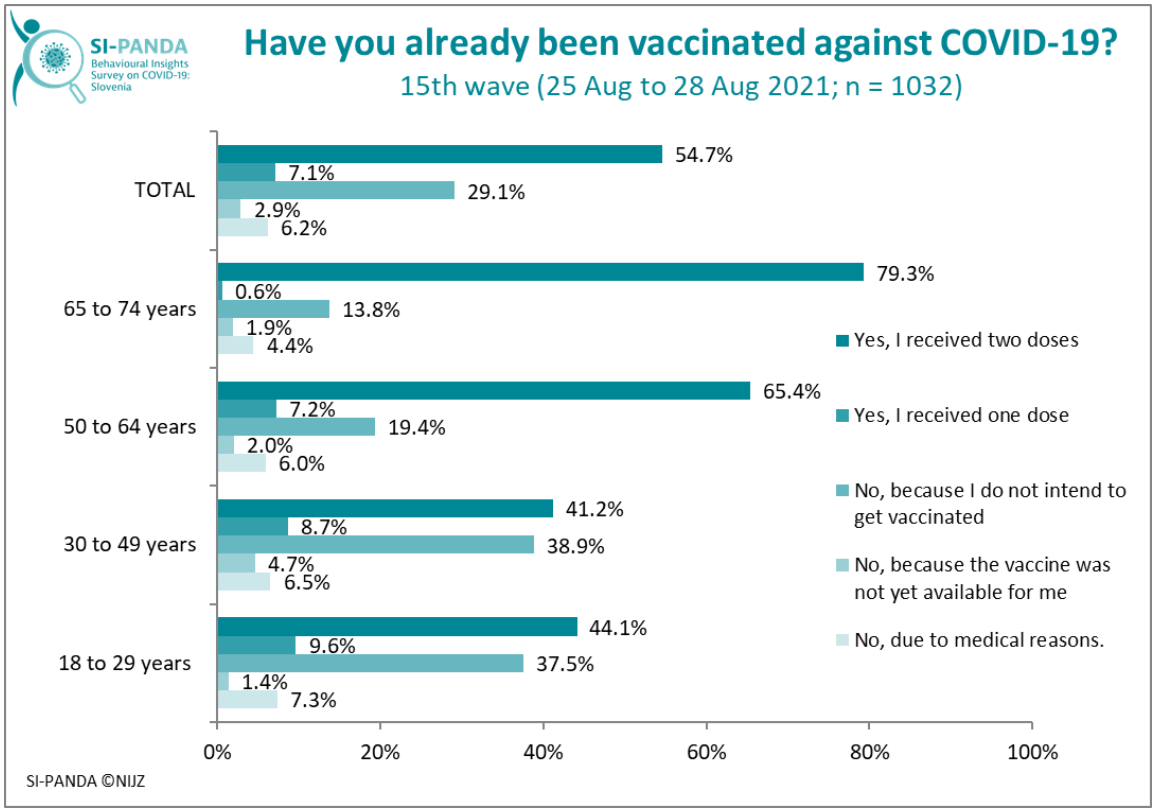

Figure 6: Vaccination against COVID-19, total and by age groups.

If we compare the last seven waves of the survey, we can see that the share of people who have already received both doses of the vaccine is steadily increasing, and the share of people who

do not intend to be vaccinated ranges from 27.5% to 35.3% and has declined in the last, 15th wave, by 6.2 percentage points compared to previous wave (Figure 7).

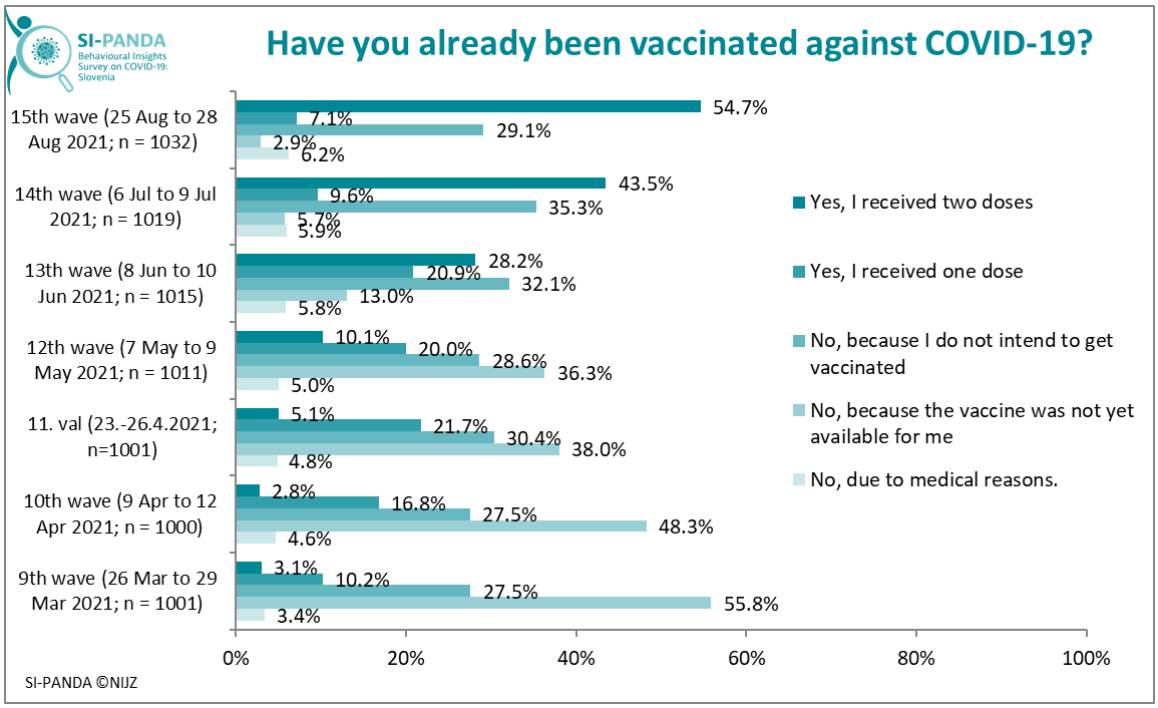

Figure 7: Vaccination against COVID-19, total and by survey waves.

As already mentioned, in the 14th wave of the survey, as many as 44% of respondents in the two youngest age group (18 to 29 years and 30 to 49 years) stated that they do not intend to be vaccinated against COVID-19, which is the highest share so far. On the other hand, in the 13th, 14th and 15th waves of the survey, a significant increase in the share of vaccinated persons with one or both doses of COVID-19 vaccine is observed in these age groups. In the 15th wave of the survey, 44.1% of respondents in the 18–29 age group were vaccinated with two doses, which is 11.6 percentage points more than in the 14th wave of the survey. A similar upward trend in the number of vaccinated persons was observed in the 30–49 age group, where the share of people vaccinated with two doses of vaccine increased by almost 11.3 percentage points in the 15th wave compared to the 14th wave (in the 14th wave: 29.9%; in the 15th wave: 41.2%).

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 5.2 on a 7-point scale), while the vaccination is mostly rejected by women in both youngest age groups (average 3.3 on a 7-point scale) (Figure 8).

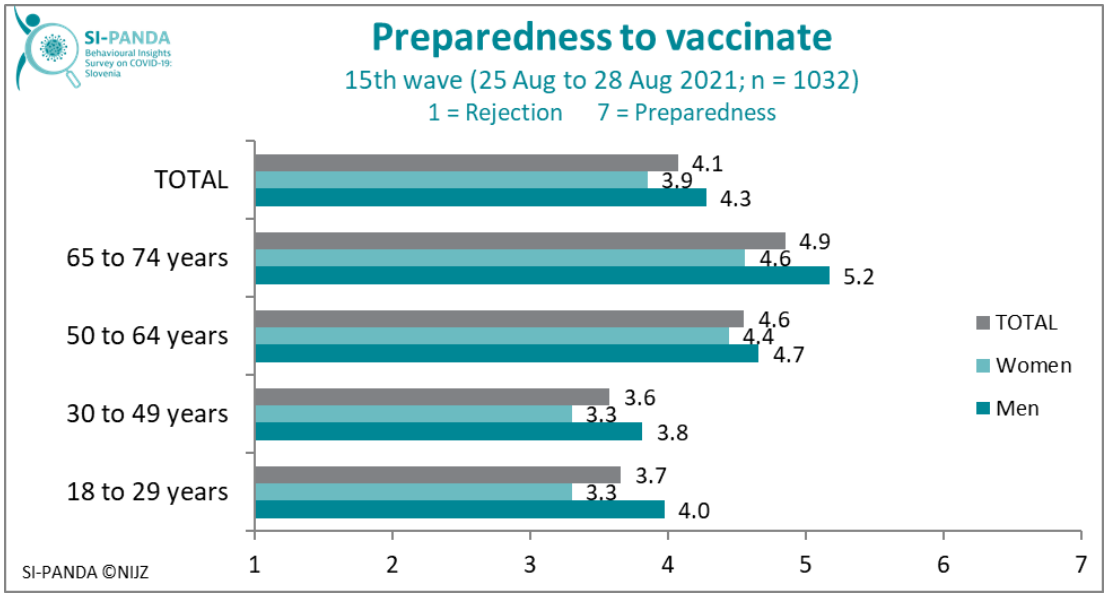

Figure 8: Preparedness to vaccinate against COVID-19, total, by gender and by age groups.

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 15th 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 (4.6), whether the vaccine has been in use for a long time, and whether they will be able to choose the type of vaccine by themselves (both 4.1) (Figure 9).

However, if we look at what the decision to vaccinate will depend on among the people for whom the vaccine has not yet been available (among them also the people who have already recovered from COVID-19 and 8 months has not yet passed since then), the predominant reason is whether there will be enough data that the vaccine is safe (5.6 average on a 7-point scale). 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 (5.1), while among those who will not be vaccinated[3], the decision on vaccination depended the most on whether there is sufficient data that the vaccine is safe (4.4) (Figure 9). The results of the survey therefore show that it is very important for people to release restrictions on movement and socializing in groups with sufficient vaccination rate and, of course, confidence in the safety of vaccines.

[3] Do not intend to be vaccinated or will not be vaccinated due to medical reasons.

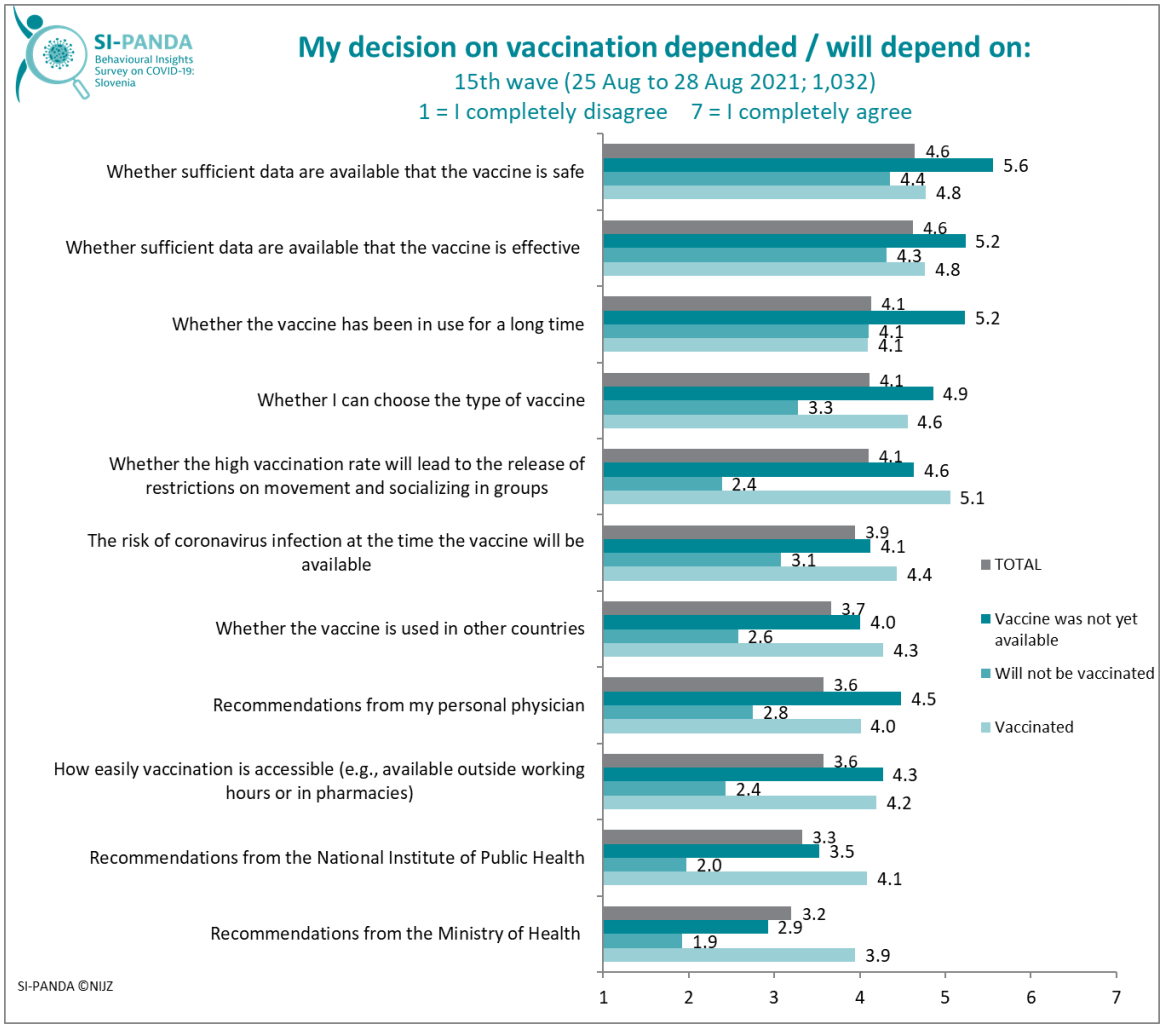

Figure 9: Reasons for the decisions to vaccinate, total and by vaccination rate.

If we compare the respondents 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 had already recovered from COVID-19 (43.3% among those who have recovered from the disease compared to 33.4% among people who have not yet recovered from the disease) (Figure 10).

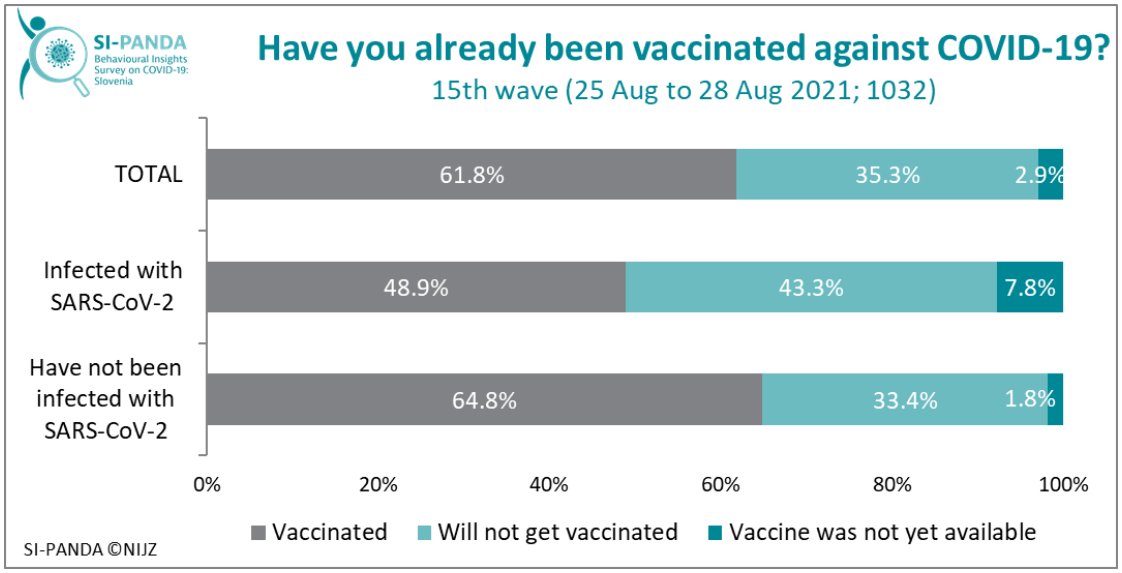

Figure 10: Vaccination against COVID-1, total and by recovery rate.

In the 15th wave of the survey, we also asked the unvaccinated respondents (respondents who do not intend to be vaccinated or were not vaccinated due to medical reasons or were not vaccinated because vaccine was not yet available for them) for more detailed reasons why respondents do not intend to be vaccinated. Concerns about side effects after vaccination, long-term health effects and concern that the vaccine is not safe are among the main reasons. About a fifth of felt that SARS-CoV-2 did not pose a risk to their health (Figure 11).

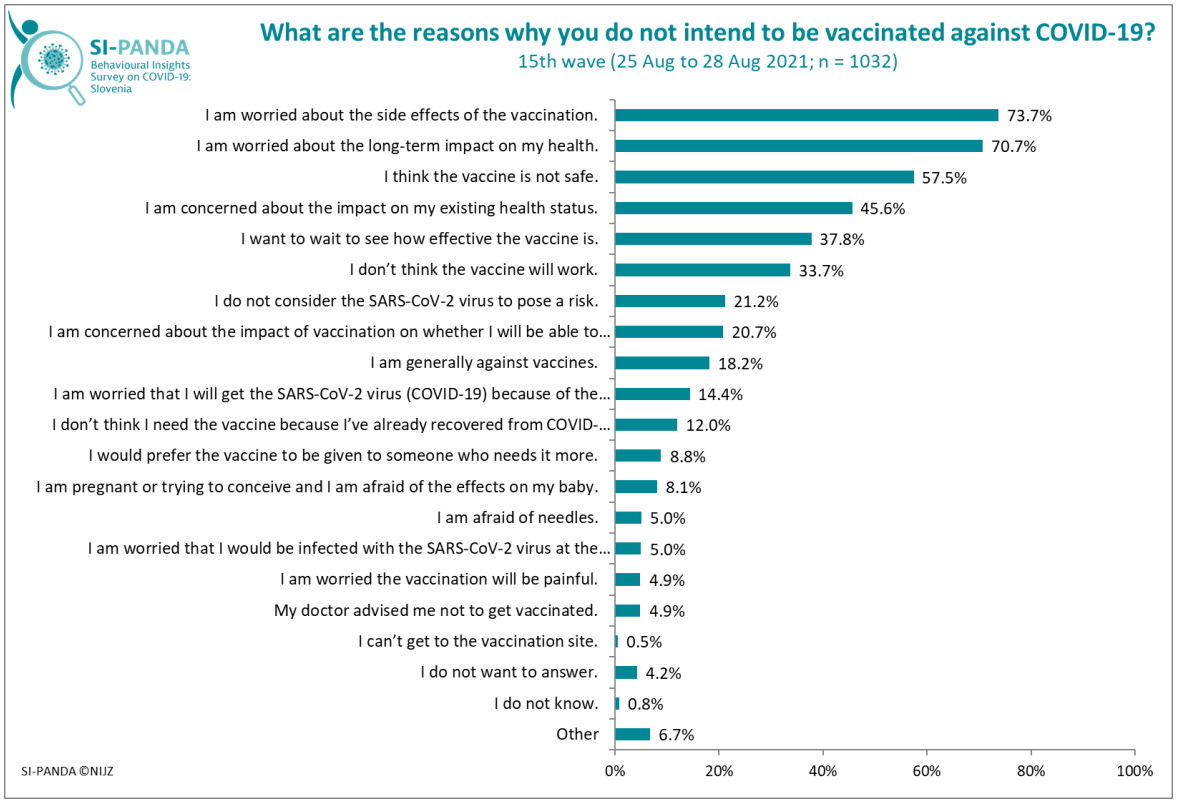

Figure 11: The reasons why respondents do not intend to vaccinate against COVID-19, total.

Interest in vaccinating children under 12 years of age

Currently, COVID-19 vaccines are registered for people aged 18 years or older (vector vaccines) or 12 years or older (mRNA vaccines). Clinical trials to evaluate the safety and efficacy of mRNA vaccines in children aged 6 months to 11 years are ongoing from March 2021[4,5]. According to unofficial data, the vaccine for children under 12 is expected to be available by the end of 2021.

In our survey, only 17% of parents of children under 12 responded that they would vaccinate their child against COVID-19 when the vaccine is available; 9% were undecided on this. The interest was statistically significantly higher in parents who also vaccinated themselves against COVID-19, while no differences in interest by gender or age were observed.

Most parents answered that the decision to vaccinate a child under the age of 12 will depend on whether there is enough information that the vaccine is safe (48%) and on the risk of a more severe course of the disease in the child (40%). A third of parents will follow the recommendation of their child's paediatrician in this decision, and a good fifth will decide whether a high vaccination rate will mean that schools and kindergartens will remain open.

[4] U.S. National Library of Medicine. ClinicalTrials.gov. Study to Evaluate the Safety, Tolerability, and Immunogenicity of an RNA Vaccine Candidate Against COVID-19 in Healthy Children <12 Years of Age. Dostopno 8.9. 2021 na https://clinicaltrials.gov/ct2/show/NCT04816643.

[5] U.S. National Library of Medicine. ClinicalTrials.gov. A Study to Evaluate Safety and Effectiveness of mRNA-1273 COVID-19 Vaccine in Healthy Children Between 6 Months of Age and Less Than 12 Years of Age. Dostopno 8.9. 2021 na https://clinicaltrials.gov/ct2/show/NCT04796896.

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

In the 15th wave of the survey, 30.5% 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), where it amounted to 49.5%. The youngest age group of respondents reported in highest shares, as throughout the survey, other unhealthy lifestyle habits in the last 2 weeks. Thus, compared to other age groups, they were the least physically active (35.5%), ate more unhealthy food (28.3% of respondents aged 18 to 29), and drank more alcohol (18.4%) than before the pandemic (Figure 12).

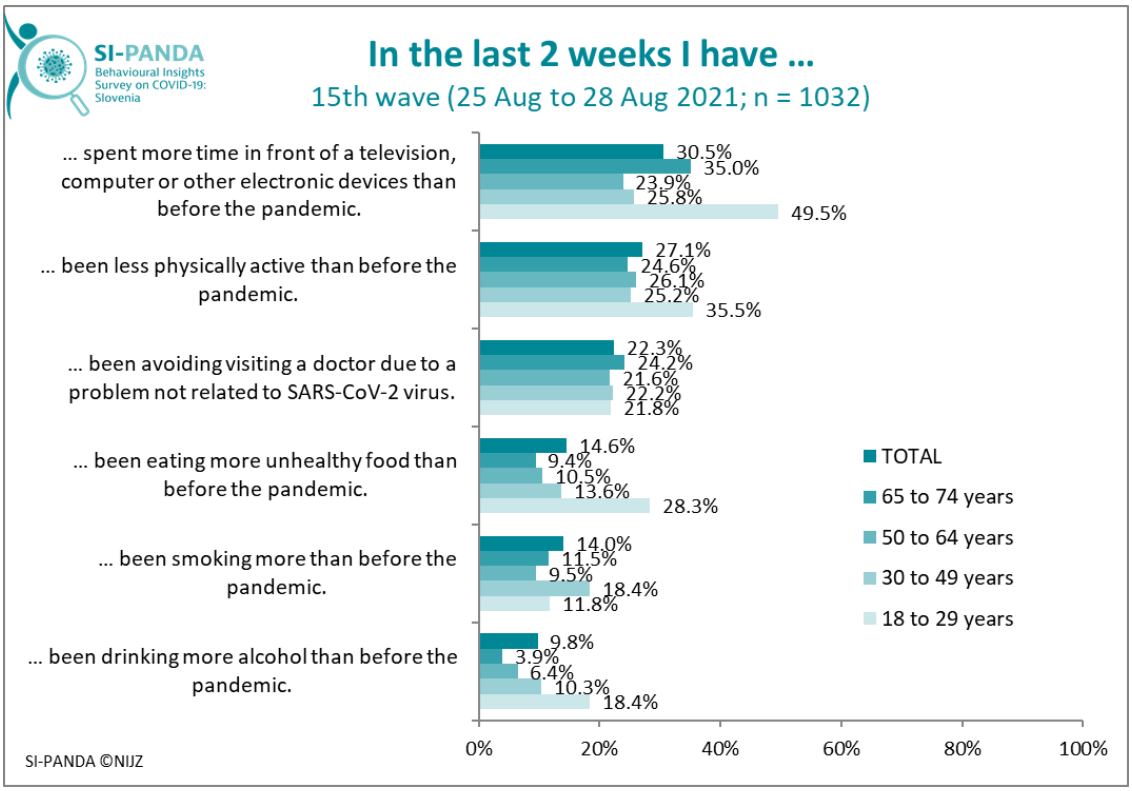

Figure 12: The impact of the pandemic on lifestyle in the past 2 weeks, total and by age groups.

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. Since the 13th wave of the survey onwards, we have also asked the respondents about the time spent in front of electronic devices – this factor is currently predominant in terms of deterioration compared to the time before the pandemic.

In the 15th wave of the survey, respondents were also asked about the impact of the pandemic on individual areas of life. As expected, the largest share (53.8%) 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 physical activity (29.7%) and on financial security (deterioration was reported by 28.6% of respondents) (Figure 13).

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 this time also in the area of family relationsips, 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.

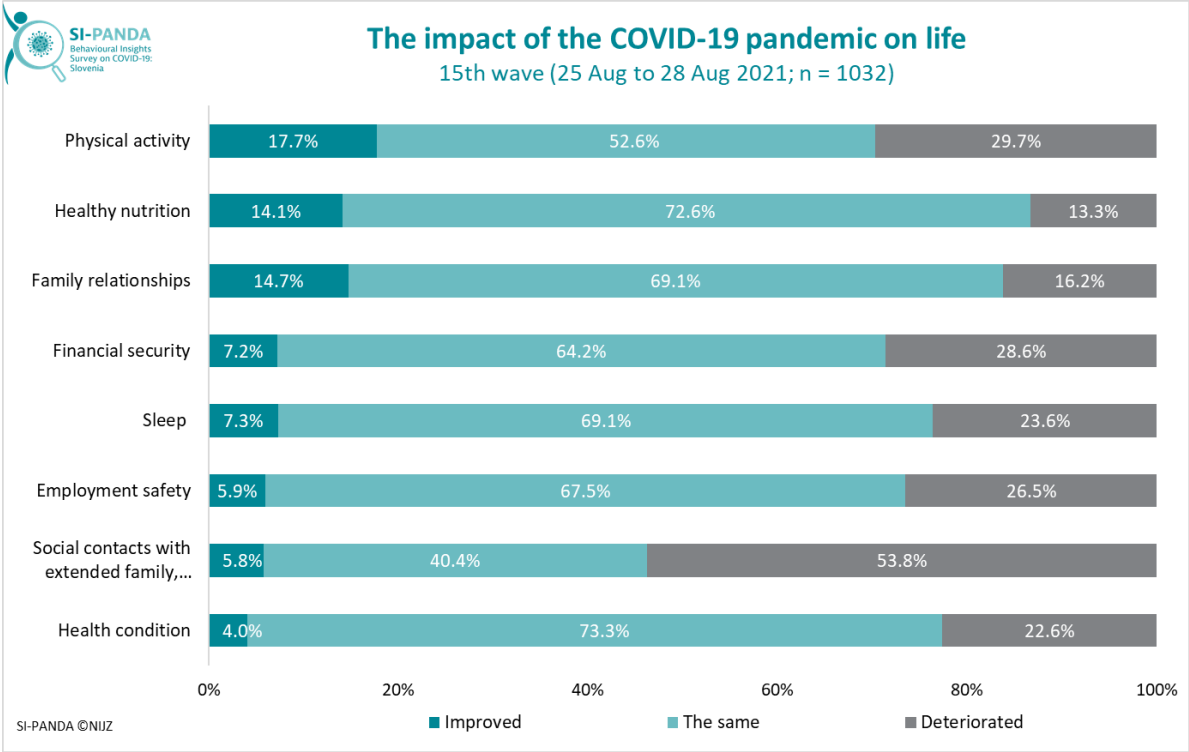

Figure 13: The impact of the COVID-19 pandemic on areas of life, total.

If we look at the impact of the pandemic on certain areas of life only in people without mental health problems, the deterioration of social contacts with extended family and friends stands out the most in this group of respondents also, as reported by 45.5% of persons (Figure 14). This was followed by a negative impact on financial security, which was reported by 21.6% of people without mental health problems.

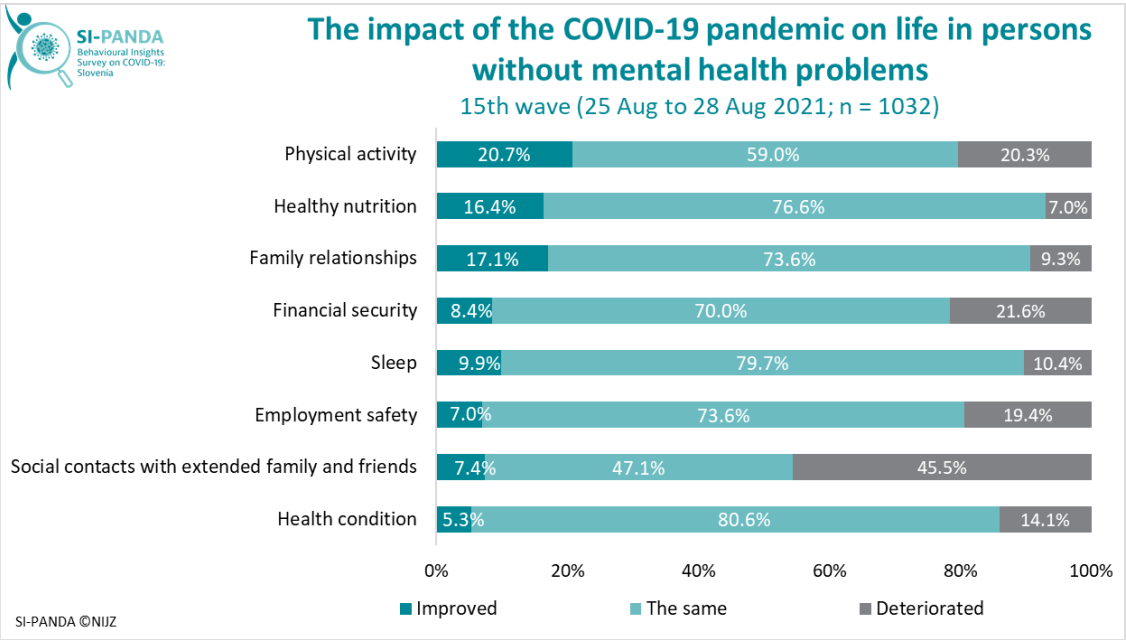

Figure 14: The impact of the COVID-19 pandemic on areas of life in persons without mental health problems, total.

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[6].

In the 15th 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 fifth of respondents (20.9%) experienced stress daily or often, most often in the age group 18 to 29, where the share was 27.8% (Figure 15). Experiencing stress decreases with age and is the lowest in the oldest age group from 65 to 74 years, namely 7.0%. Compared to the CINDI 2020 survey, which took place about a year ago, from 11 May till the end of June 2020, the shares of respondents who experience stress daily or often are higher (by about 4 percentage points). However, the distribution of frequencies by age groups remains approximately the same in all surveys.

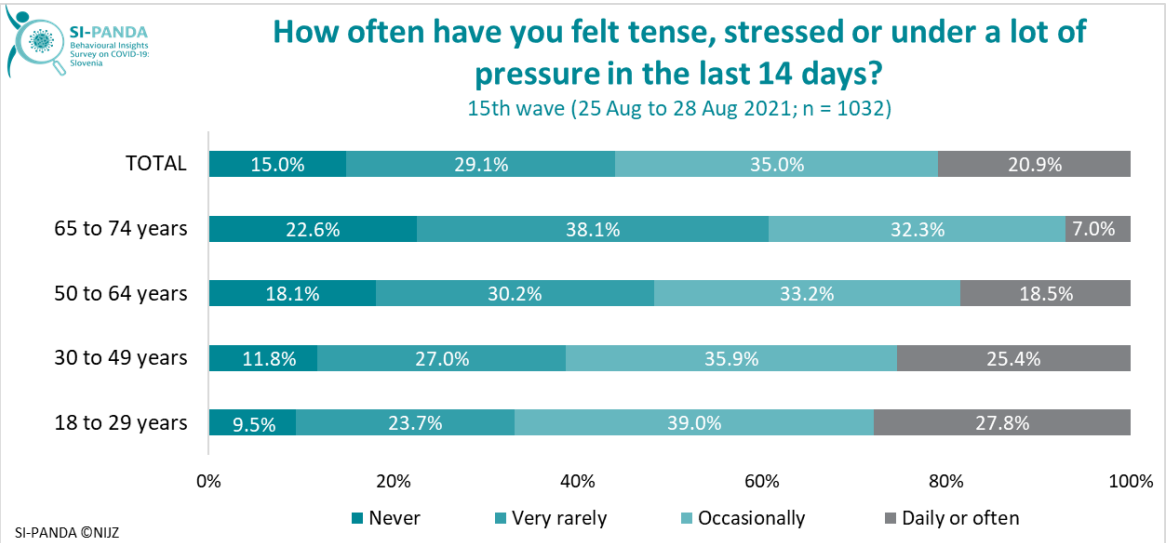

Figure 15: Frequency of experiencing stress in the last 14 days, total and by age groups.

Stress is more often experienced by women, i.e., it is experienced daily or often by 26.6% of surveyed women and by 15.6% surveyed men. Similar results were obtained in the CINDI 2020 survey and in foreign studies[7].

Stress is, as expected, experienced more often by respondents who show signs of depressive disorder, namely by more than half (62.7%) compared to those with mental health problems (37.6% experience stress daily or often) and those without mental health problems (only 6.8% experience stress often or daily) (Figure 16).

[6] (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.).

[7] Kowal, M., Coll-Martín, T., Ikizer, G., Rasmussen, J., Eichel, K., Studzińska, A., Koszałkowska, K., Karwowski, M., Najmussaqib, A., Pankowski, D., Lieberoth, A. and Ahmed, O. (2020), Who is the Most Stressed During the COVID-19 Pandemic? Data From 26 Countries and Areas. Appl Psychol Health Well-Being, 12: 946-966. https://doi.org/10.1111/aphw.12234.

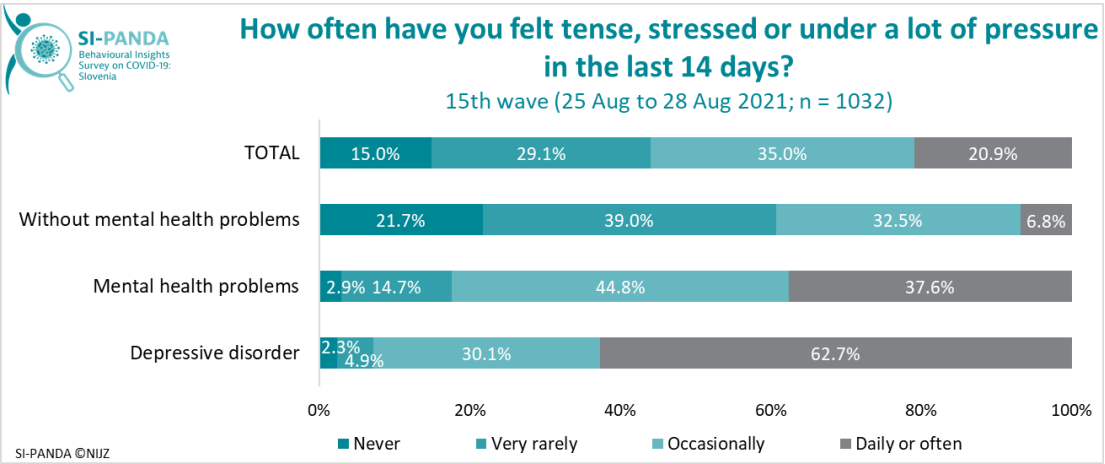

Figure 16: Frequency of experiencing stress in the last 14 days, total and by mental health problems.

Respondents cited workload as the most common reason for stress in the 14th and 15th waves of the survey (39.7% in 15th wave and 42.5% in the 14th wave). This is followed by concerns about possible new restrictions and measures (35.0%; 34.9% in the 14th wave), and concerns about untrue information about SARS-CoV-2 virus, which increased in the 15th wave (34.5%; in the 14th wave 31.2%). Concerns about the uncertain financial future were also slightly higher in the 15th wave (29.2%; in the 14th wave: 27.7%), the health of family or friends (24.6%; in the 14th wave: 24.4%) and concerns about their own health (20.9%; in the 14th wave: 20.5%), which is most likely related to gradual worsening of epidemiological situation in Slovenia. The biggest gender gaps are in workloads, which are a more common cause of stress for men than for women, and for concerns about the health of family or friends, which is a more common cause of stress for women than for men. For other causes, the gender differences are smaller (Figure 17).

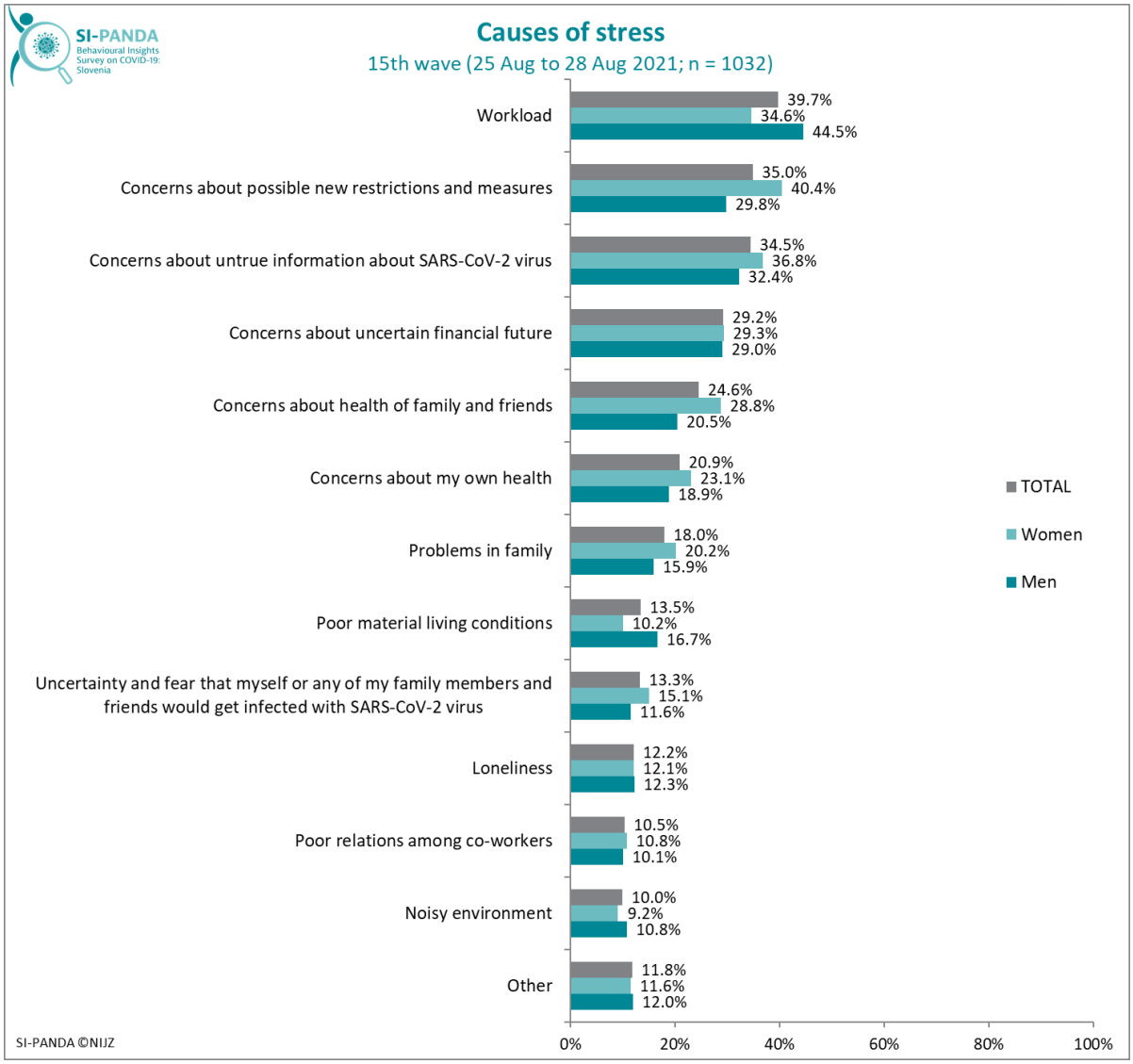

Figure 17: Causes of stress, total and by gender.

Loneliness was cited as a cause of stress by 12.2% of respondents, and the shares are almost the same among men and women (Figure 18). The share of people concerned about loneliness has not changed significantly in the last three waves, but the youngest respondents (18 to 29 years) expressed the highest level of such concern, namely in 15th wave of the survey, one third of these respondents were concerned about loneliness. The share of younger respondents (18 to 29 years) who are concerned about loneliness increased by more than 10 percentage points compared to the 13th wave of the survey.

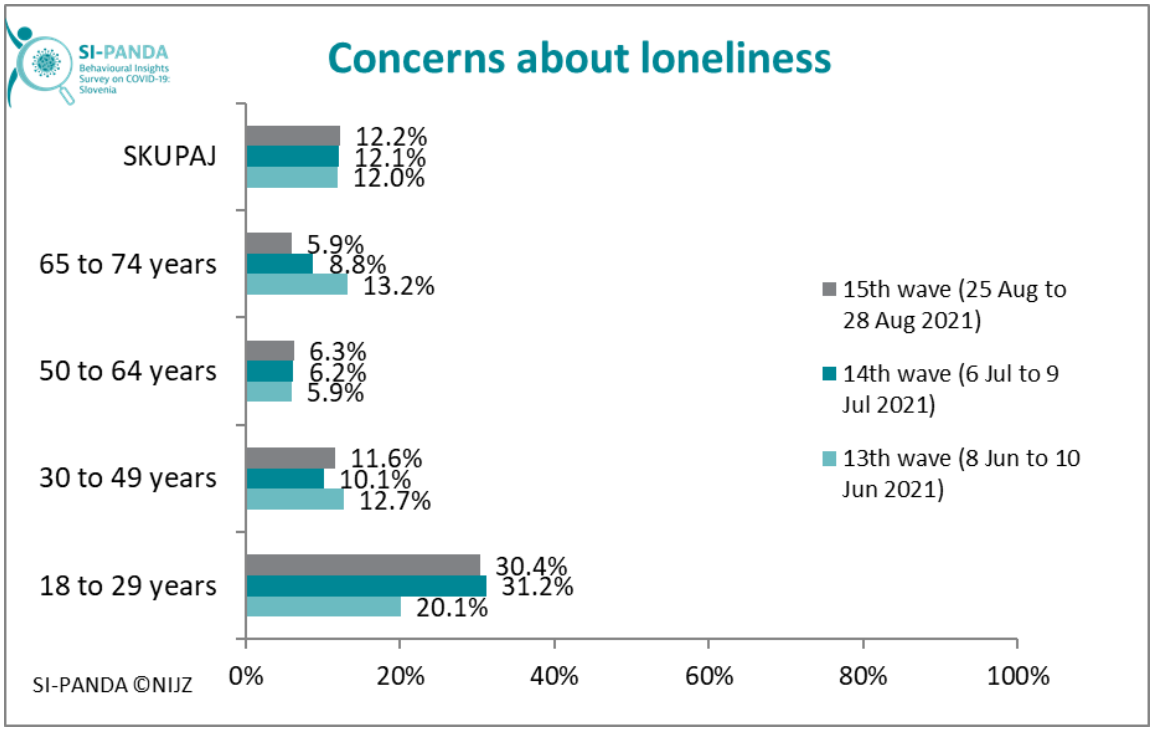

Figure 18: Concern about loneliness, total and by age groups, by survey waves.

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 (82.4%) managed tensions, stress and pressure easily or with some effort, 14.8% had major problems, and 2.9% had severe problems or did not manage stress. Women and respondents in 30-49 and 18-29 age groups had more problems with stress management.

In the 15th wave of the survey, half of the respondents (53%; in the 14th wave: 50.3%) reported that they could always or often find a way to relax when they needed to, and 10.4% (in the 14th wave: 11.2%) 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 (31.8%; in the 14th wave: 39.6%), followed by those with mental health problems (16.2%; in the 14th wave: the same) and those without mental health problems (4.4%; in the 14th wave: 4.5%) (Figure 19).

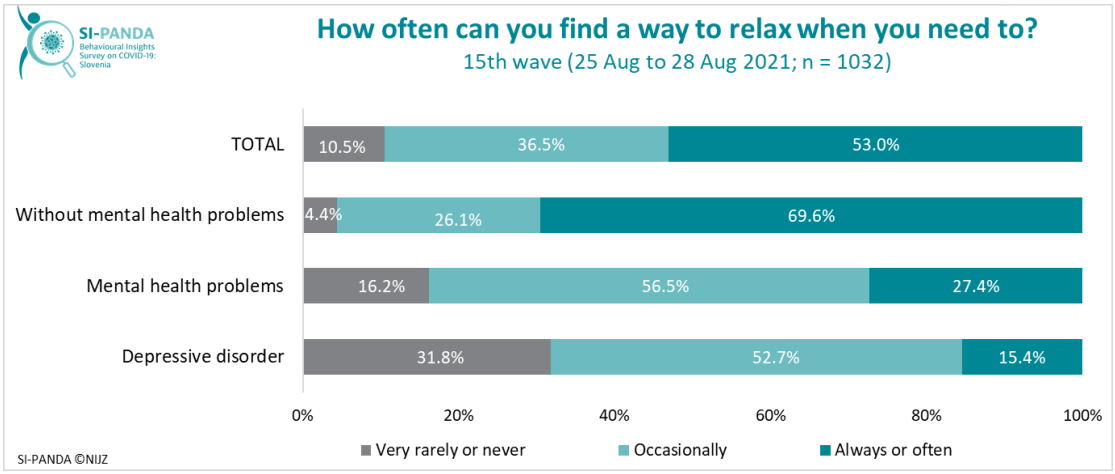

Figure 19: Frequency of relaxation, total and by mental health problems.

“Recovered, vaccinated, tested” - RVT rule

From 11th to 15th wave of the survey, we were interested in what the respondents thought about free testing for SARS-CoV-2 virus infection and about the availability of services and activities under certain conditions. In the 15th wave of the survey, 58.5% of respondents agree that the population should have two free PCR tests per month, which would be available without health reasons – the share of these persons decreased by 6.8 percentage points compared to the 14th wave. If the condition for using the service is a negative test, 53.1% of respondents believe that a rapid antigen test should be sufficient. 41.5% believe that all services and activities should be available without any COVID-19-related evidence, and only 31.3% agree that only PCR testing method should be used as evidence of a negative test (Figure 20).

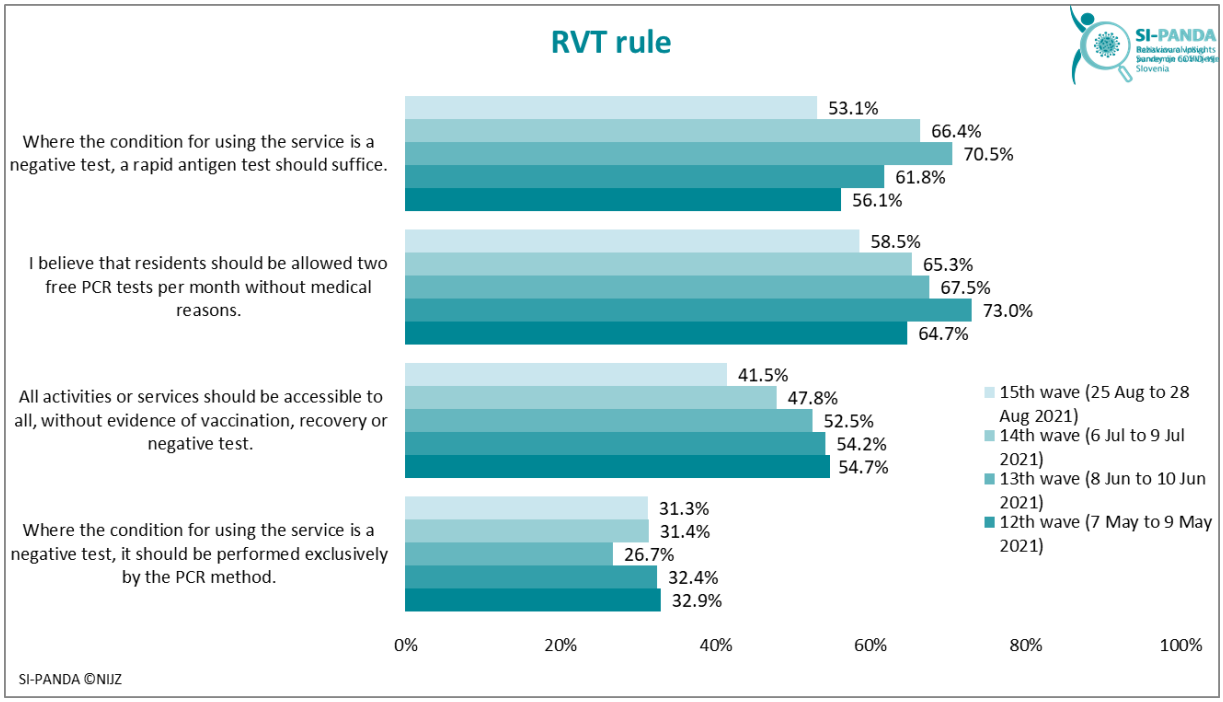

Figure 20: Respondents’ agreeing on COVID-19 testing and conditions for using services, total and by survey waves.

With regard to age groups, the youngest age group, as expected, has the lowest shares of those who believe that only a test performed by the PCR method should suffice as evidence (18.6%), while in the oldest age group, almost half of respondents share this opinion (Figure 21).

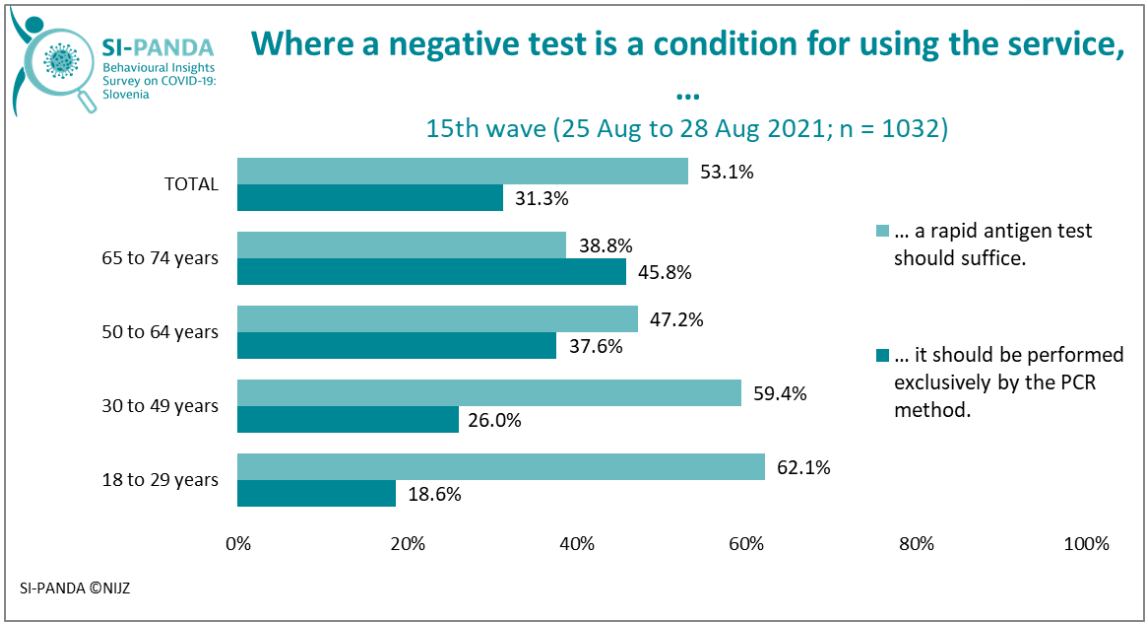

Figure 21: Respondents' opinion on what test should be sufficient to use the service, total and by age groups.

More than 40% of respondents believe that all activities or services must be accessible to all without evidence of vaccination, recovery or a negative test. Almost half of those under the age of 50 want access to services without all the evidence. This may be due to lower vaccination coverage among younger people and a higher share of those who do not intend to be vaccinated in the youngest age groups (data from previous waves of research) (Figure 22).

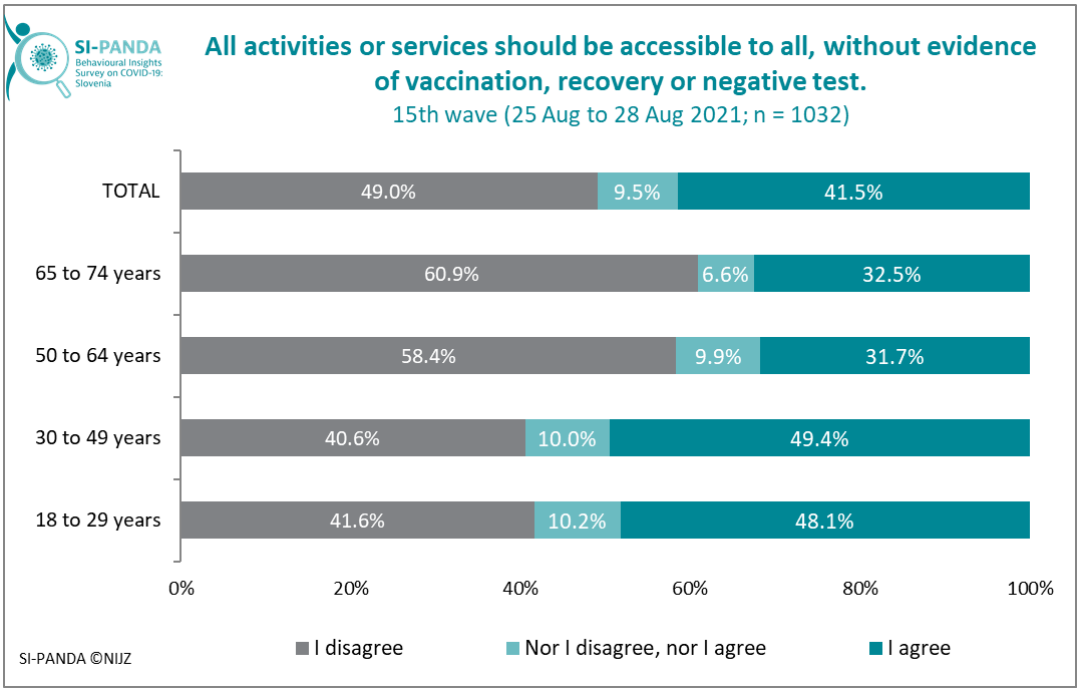

Figure 22: Respondents' opinion on whether all activities and services should be accessible to all, without any RVT evidence, total and by age groups.

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.

More than 60% of respondents believe that rapid antigen testing should remain free-of-charge; the introduction of voluntary free self-testing at home is supported by almost half of the respondents (Figure 23). Among unvaccinated respondents, almost 90% believe that rapid antigen testing should be free-of-charge; the introduction of voluntary free self-testing at home is supported by almost 60% of respondents in this group. Half of all and 12.6% of unvaccinated respondents believe that vaccinated persons should be subject to less stringent restrictions than unvaccinated persons.

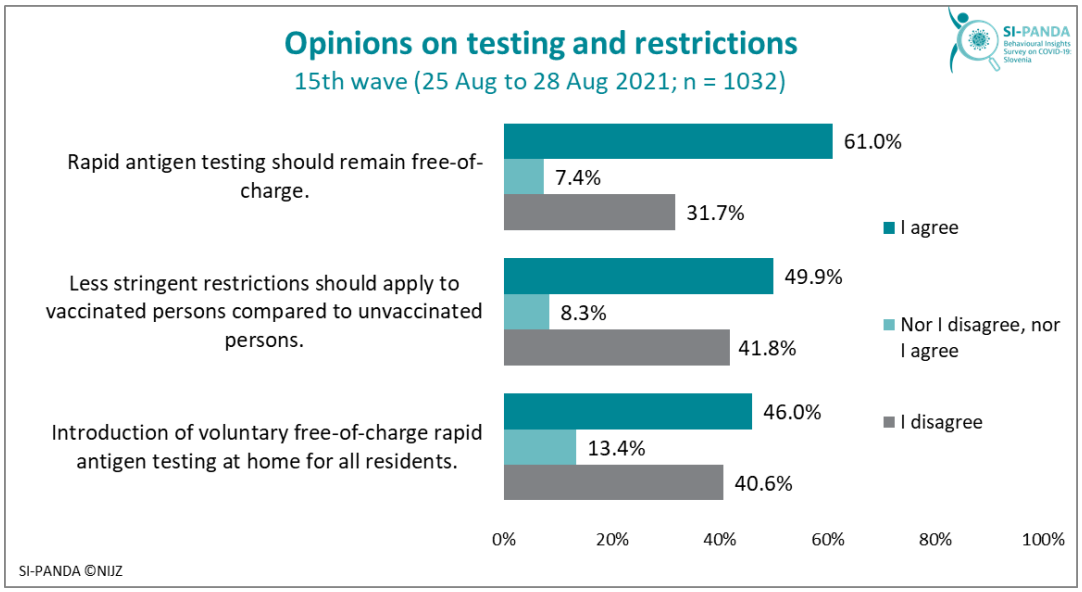

Figure 23: Respondents' opinions on testing and restrictions, total.

Among the reasons for vaccination, more than a quarter of vaccinated respondents stated that they were vaccinated, among other, to avoid payable testing. However, according to the current results of the survey, a larger increase in vaccination coverage due to payable testing is not expected at the moment, as less than 5% of unvaccinated respondents have expressed their intention to vaccinate for this reason.

Of the vaccinated, more than half confirmed that they had been vaccinated so that the schools could remain open – among them more women than men (Figure 24).

More than half of the vaccinated have been vaccinated, among other, so that schools can remain opened. Interestingly, this share is statistically significantly higher in women, who are otherwise slightly less in favour of vaccination than men (data from previous waves of the survey).

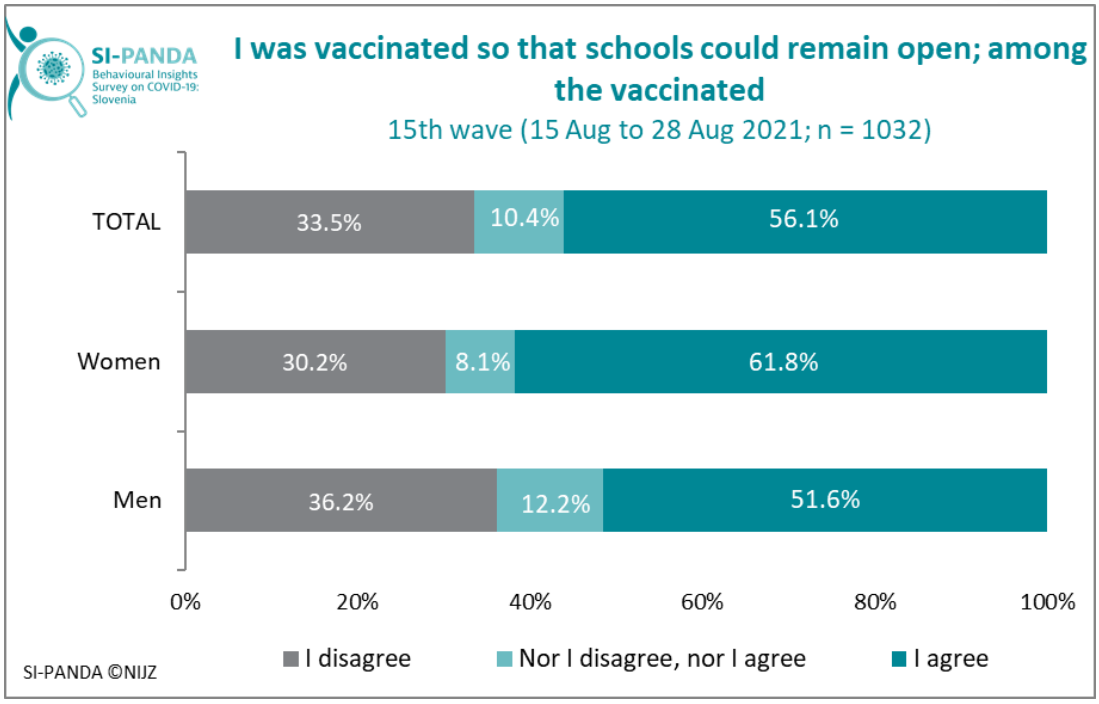

Figure 24: Vaccination in order to keep the schools open, vaccinated respondents total and by gender.

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 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[8]. 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.[9].

In the 15th wave of the survey, 19.0% of respondents report that they are or have been infected with the SARS-CoV-2 virus so far, of which 10.0% report that their infection was asymptomatic, 62.9% report that the course of the disease was mild, in 23.6% the course of the disease was more severe, but did not require hospital treatment, and 3.6% had been treated in the hospital. Respondents who are or have been infected with SARS-CoV-2 virus so far were asked from the 11th 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[10]. 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 **25**).

We can find that in 15th wave most people (72.9%) still had some problems one month after recovering from the infection. The most common problems were malaise, fatigue and lack of energy, reported by more than two fifths of recovered patients; just under a third of respondents reported problems with the perception of taste and smell; and around a fifth reported sleep disorders and problems with concentration and memory. Further they reported chest pains and shortness of breath, muscle and joint pains, unpleasant feeling of fear, sadness, heart palpitations, digestive problems, etc. (Figure **25**). In all five 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.

[8] Brackel, CLH, Lap, CR, Buddingh, EP, et al. Pediatric long-COVID: An overlooked phenomenon? Pediatric Pulmonology. 2021; 56: 2495– 2502. https://doi.org/10.1002/ppul.25521.
[9] 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.
[10] 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.

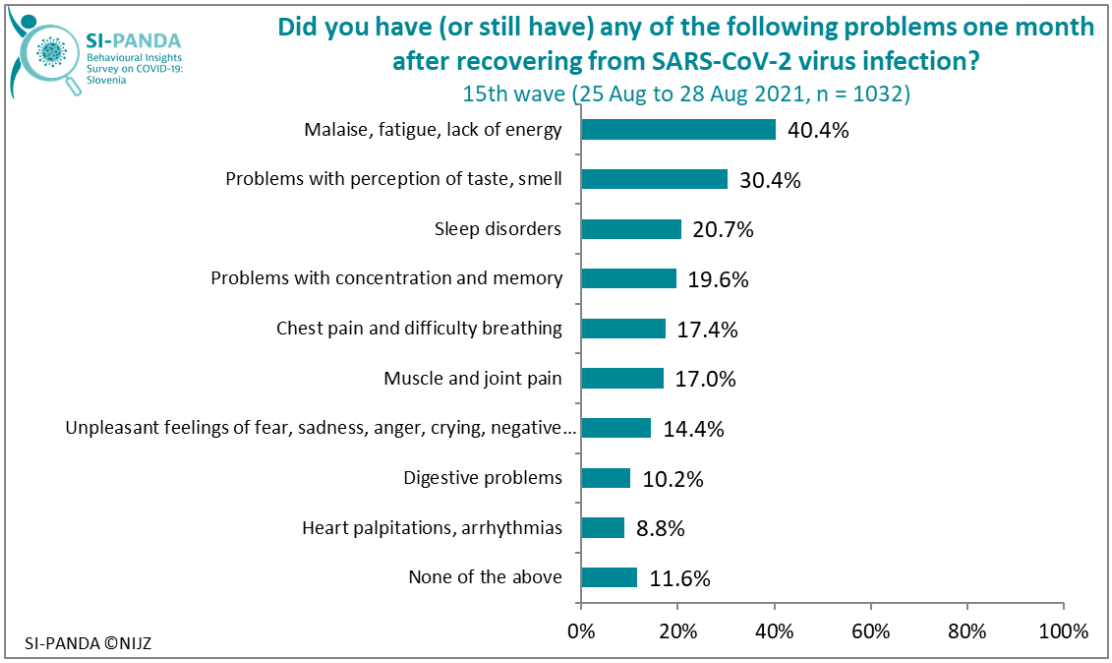

Figure 25: Health problems one month after the respondents had already recovered from SARS-CoV-2 virus infection, total.

Comparisons of the last five waves show that the share of people with one problem has risen by around 10 percentage points since the 11th wave, while the share of those with two problems in the 15th wave is 12.1% and is the lowest so far. In the 15th wave, the share of people with five or more problems rose again (Figure 26).

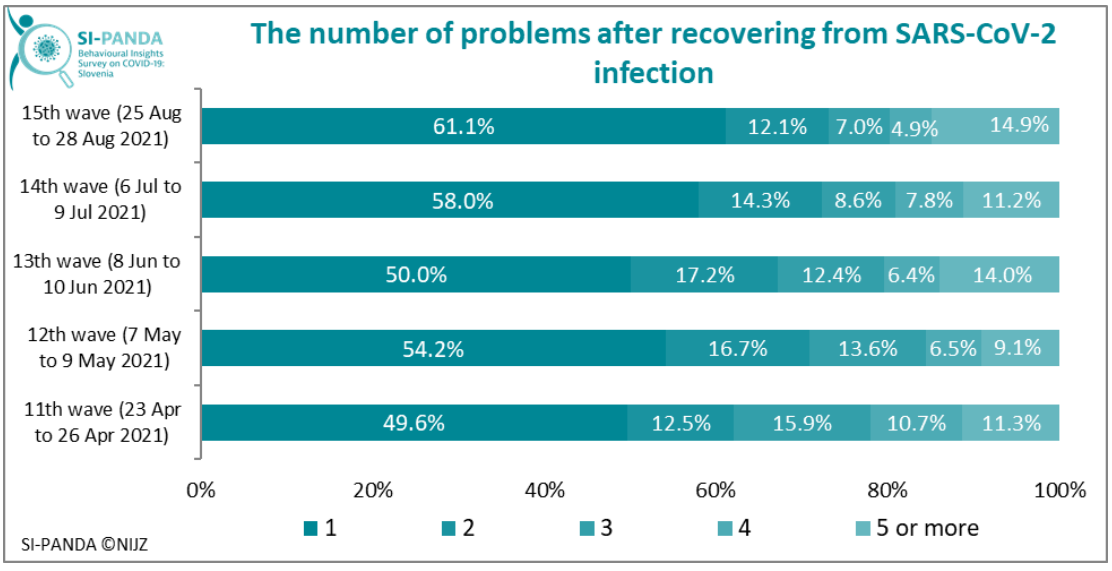

Figure 26: The number of problems after recovery from SARS-CoV-2 infection, by survey waves.

Surprisingly, a large share of persons does not consult a doctor about problems after recovery from COVID-19. In the 11th wave there were 58.7% such respondents, in 12th wave 65.2%, in 13th wave 58.2%, in 14th wave 65.3%, and in 15th wave 63.8%.

When asked how long the problems lasted after the recovery from infection, most of them (51.5%) answered that 3 months and more, a good fifth (22.6%) answered that the problems lasted up to

1 month and a quarter (25.9%) answered that they lasted from 1 to 2 months. Most respondents (80.2%) answered that the problems affected their work, caring for things at home and relationships with people: more than half (59.7%) stated that the problems had a slight impact on work, care for the home and relationships with people, and 20.5% stated that the problems impacted these activities very or extremely. Just under a fifth of recovered respondents (19.8%) 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 his or her daily life. All this can have economic consequences for the individual, his 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.

Measures to curb the spread of COVID-19 infections in the school environment and the vaccination of children

The 15th wave of the survey took place during the summer holidays, just before the start of the new school year 2021 / 22, when it was decided that educational work will be carried out according to model B (School year 2021 / 2022 in the Republic of Slovenia in COVID-19-related conditions[11]). In this light, we were interested in the views of parents on measures to limit the spread of SARS-CoV-2 infections in schools, on the vaccination of children and the impact of the COVID-19 epidemic on the lifestyle of their children.

The survey involved 295 respondents who are the parent or a guardian of at least one child under the age of 18 and live in a joint household. Survey data show that parents are most supportive of having live schooling for all children (pupils and students) regardless of the epidemiological situation (82.5%); this is followed by support for the implementation of outdoor lessons (67.1%) and regular checking of the RVT condition among all school employees (51.7%). Other measures are supported to a lesser extent (Figure **27**).

[11] https://www.nijz.si/sites/www.nijz.si/files/uploaded/modeli_in_priporocila_2021_22.pdf

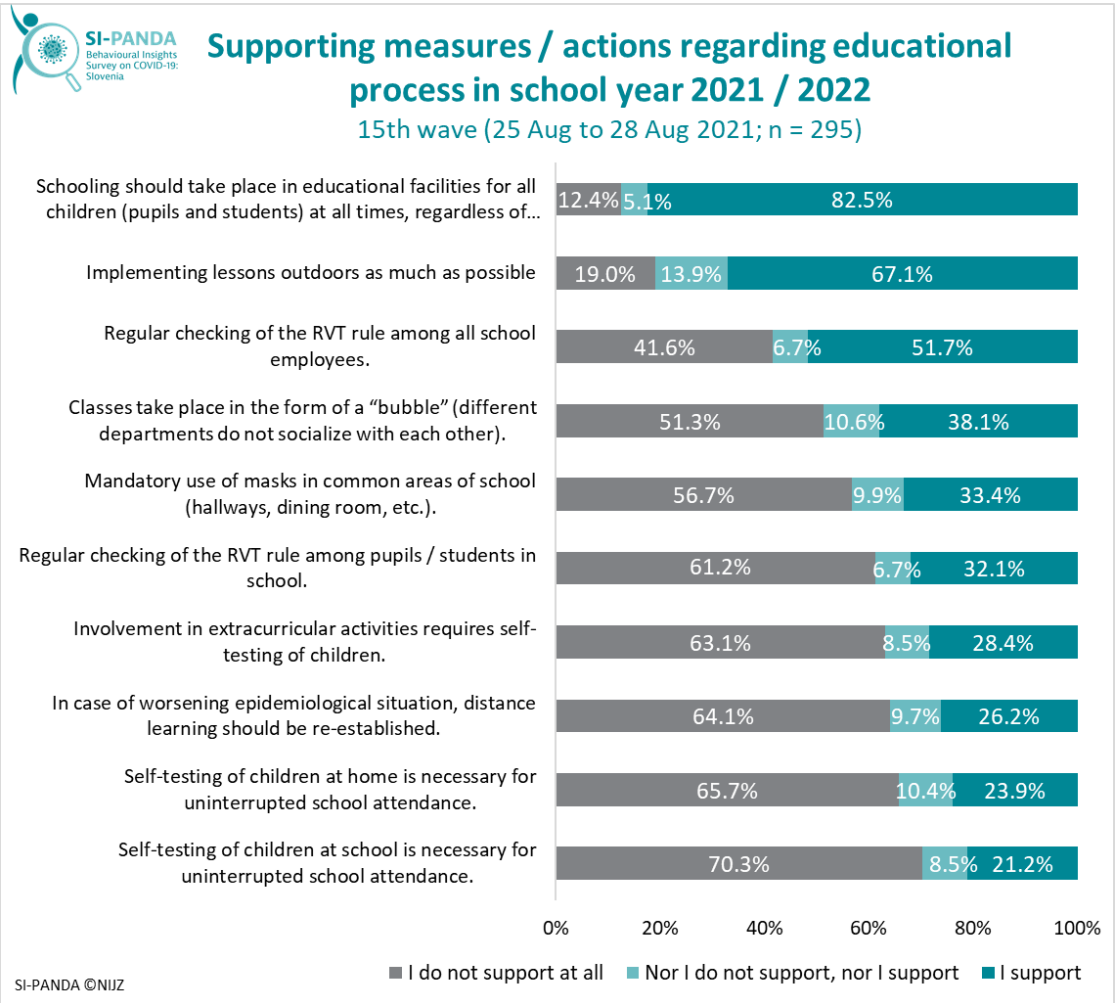

Figure 27: Supporting measures / actions regarding educational process in school year 2021 / 2022, respondents who are a parent or a guardian, total.

Surveyed parents who are vaccinated against COVID-19 are more in favour of measures / actions to curb the spread of COVID-19 infections in the school environment compared to surveyed parents who have not been vaccinated[12] (Figure 28). The exception is the measure that schooling should take place in educational facilities at all times, regardless of the epidemiological situation.

[12] Do not intend to be vaccinated, will not be vaccinated due to medical reasons, or the vaccine is not yet available for them.

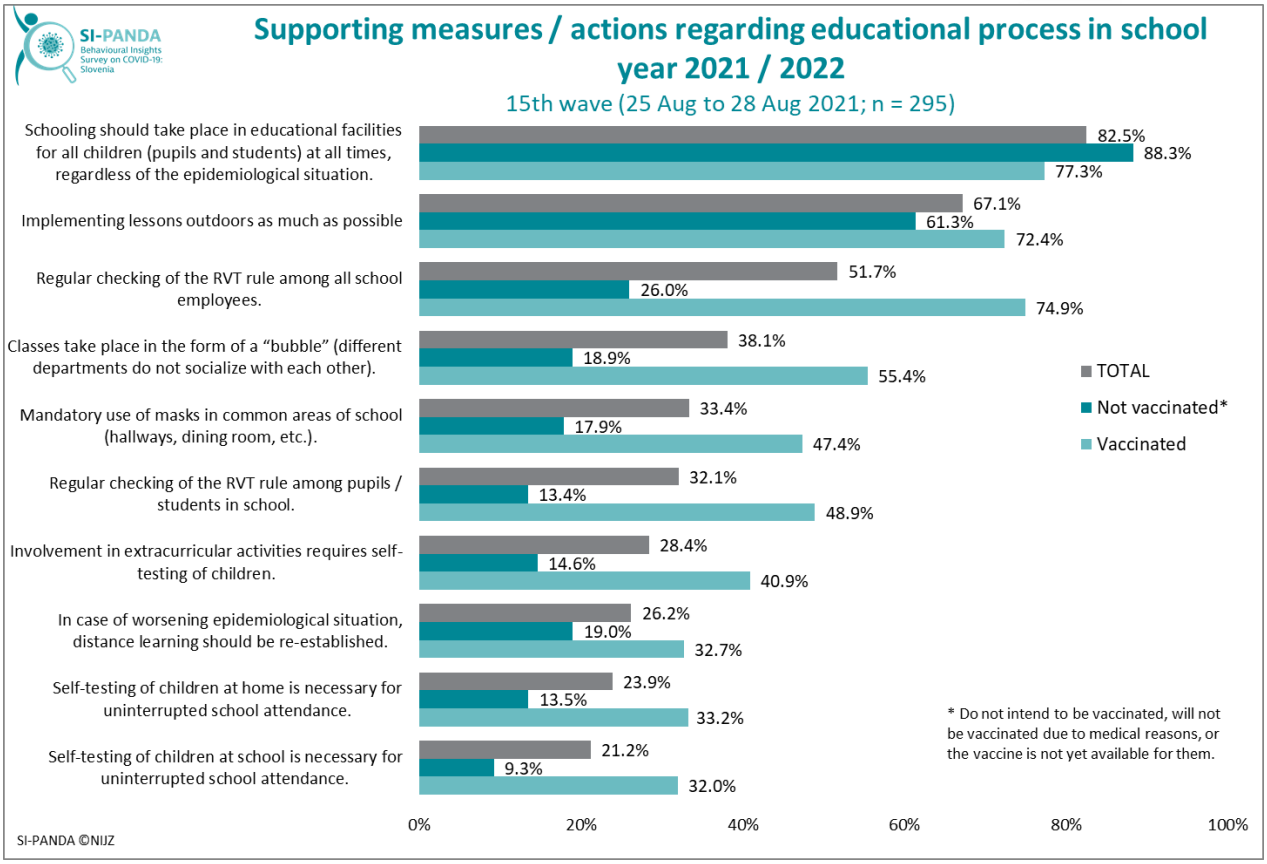

Figure 28: Supporting measures / actions regarding educational process in school year 2021 / 2022, respondents who are a parent or a guardian, total and by vaccination rate.

Views on the vaccination of children

Regarding child vaccination, we received data from 295 surveyed parents for 482 children aged 0 to 17 years. Of children aged 12 and over, 20.9% have been vaccinated with at least one dose of COVID-19 vaccine, and 20.9% of their parents have expressed their intention to vaccinate them, 53.2% of children were not and will not be vaccinated and 2.5% of children will not be vaccinated due to health reasons. In the analysis, we took into account data obtained from parents or guardians of children aged 12 and over for whom the vaccine is registered and available in Slovenia.

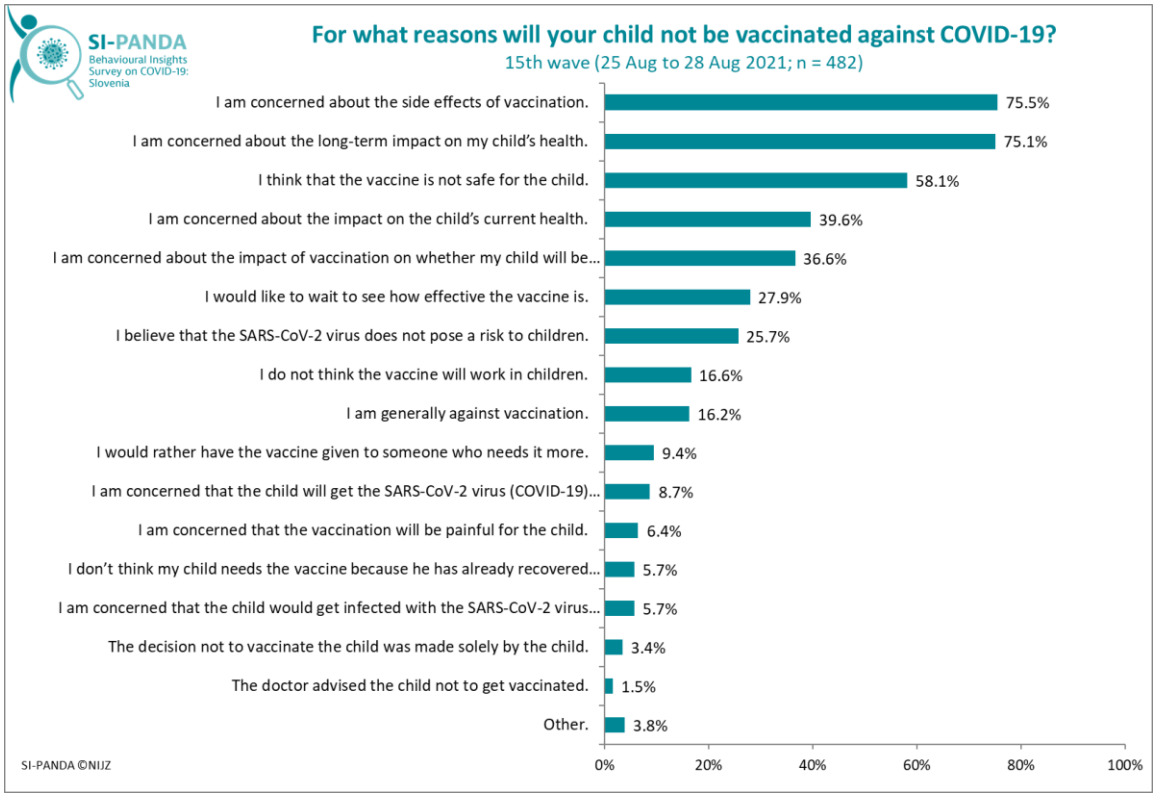

Figure 29: Reasons why not vaccinate the children, responses of parents or guardians, total.

Parents of unvaccinated children (are not and will not be vaccinated) were also asked for more detailed reasons why they do not intend to vaccinate their children. Concerns about the side effects of the vaccination, concerns about the long-term impact on the child's health and the safety of the vaccine for children are among the main reasons (Figure **29**). Parents were able to give several reasons why they do not intend to vaccinate their children.

Parents who decided to vaccinate their children against COVID-19 reported that their decision depended to a large extent on the fact that this would increase the likelihood of undisturbed course of schooling in educational facilities. Vaccination was also largely due to the protection of other members if the household and the availability of sufficient data on the efficacy and safety of the vaccine in children (Figure **30**).

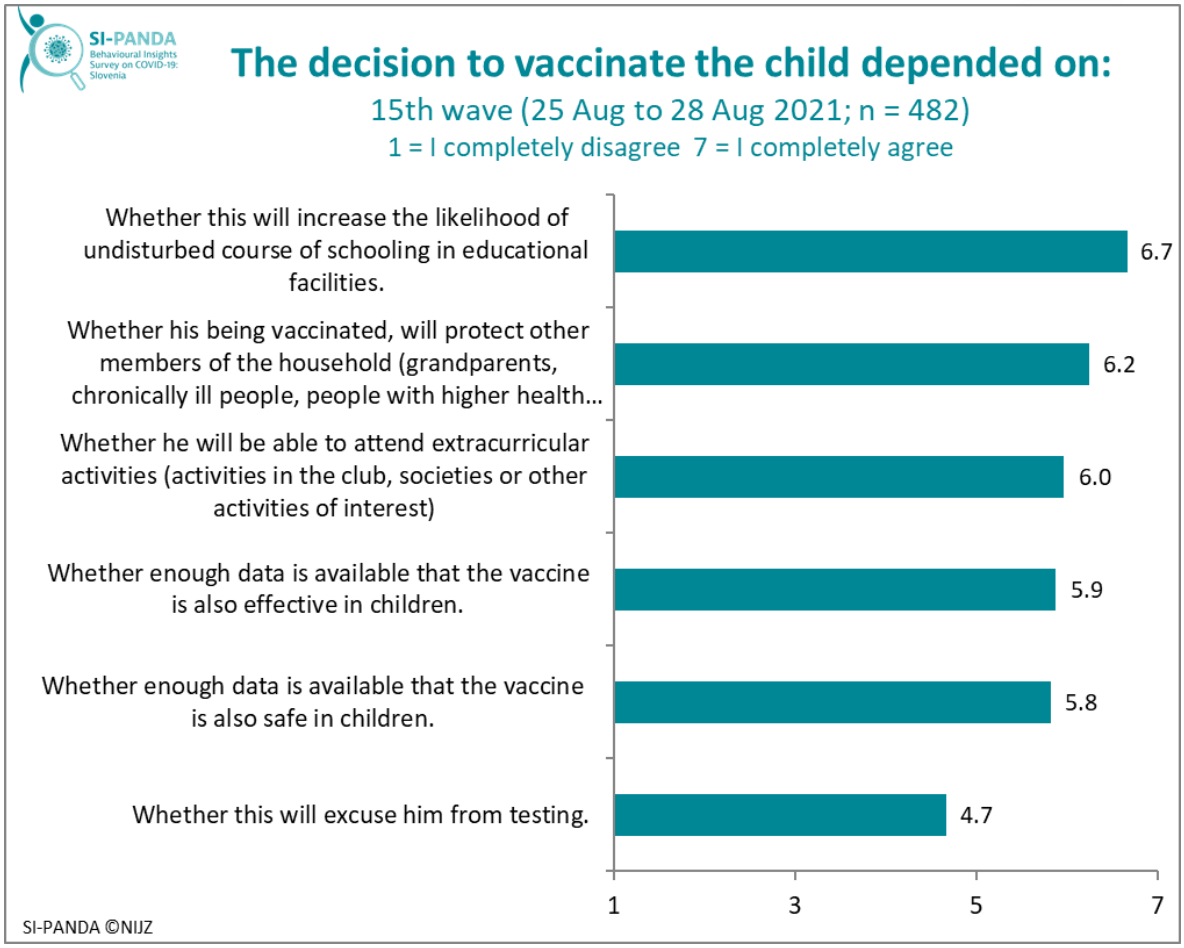

Figure 30: Reasons to vaccinate the child, parents and guardians, total.

The impact of the pandemic on the lifestyles of children

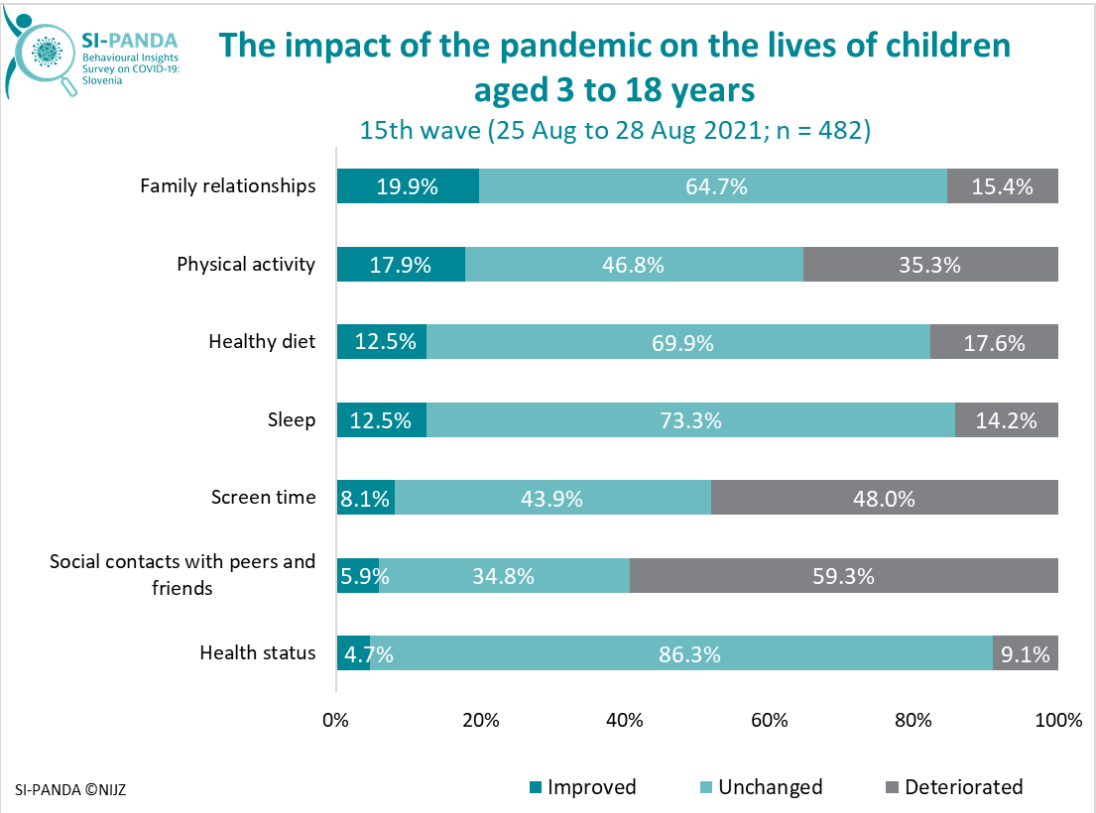

Figure 31: The impact of the COVID-19 pandemic on the lives of children aged 3 to 18 years, responses of parents and guardians, total.

Regarding the impact of the COVID-19 pandemic on the lifestyles of children, we received data from children's parents for children aged 3 to 17 years inclusive. According to parents, the pandemic had the most negative impact on children's social contacts with peers and friends and on their screen time (Figure 31). For more than a third of children (35.3%) parents reported a deterioration in their physical activity. On the other hand, family relationships improved in almost 20% of children, or remained unchanged (64.7%). Similar results are for sleep, healthy diet and children's health status.

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