



COVID-19 PANDEMIC IN SLOVENIA

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

7th wave

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Authors:

National Institute of Public Health:

[Ada Hočevar Grom](#), Analysis and Development of Health Centre

[Andreja Belščak Čolaković](#), Analysis and Development of Health Centre

[Maruša Rehberger](#), Health Data Centre

[Darja Lavtar](#), Health Data Centre

[Assist. Prof. Mojca Gabrijelčič Blenkuš, Ph.D.](#), Analysis and Development of Health Centre

[Assist. Prof. Helena Jeriček Klanšček Ph.D.](#), Analysis and Development of Health Centre

[Vida Fajdiga Turk](#), Analysis and Development of Health Centre

[Assist. Prof. Matej Gregorič, Ph.D.](#), Analysis and Development of Health Centre

[Nastja Šivec](#), Analysis and Development of Health Centre

[Rok Poličnik](#), Prevention and Promotion Programmes Management Centre

[Urška Blaznik, Ph.D.](#), Environmental Health Centre

[Tanja Carli](#), Environmental Health Centre

[Brigita Zupančič Tisovec](#), Novo mesto Regional Unit

SI-PANDA RESEARCH TEAM:

Ada Hočevar Grom, Andreja Belščak Čolaković, Maruša Rehberger, Darja Lavtar, Aleš Korošec, Assist. Prof. Mojca Gabrijelčič Blenkuš, Ph.D., Tatjana Kofol Bric, Matej Vinko, Assist. Prof. Helena Jeriček Klanšček, Ph.D., Tanja Carli, Petra Klepac, Mitja Vrdelja, Janina Žagar, Ticijana Prijon, Ph.D., Metka Zaletel

The authors of the publication are responsible for its contents.
The text is not proofread.

Design:

[Andreja Frič](#)
[Tadeja Horvat](#)

Translation:

[Mihaela Törnár](#)

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>

Contacts:

ada.hocevar@nijz.si
raziskave@nijz.si

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INTRODUCTION

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

Understanding human behaviour in relation with COVID-19 enables the identification of at-risk target groups and helps to find solutions that encourage better adherence to protective behaviour recommendations. Adherence to measures in the population 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 burden of COVID-19 at the individual and societal 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 it, we want 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. Below, there are some key findings. 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 Organization¹ 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 is conducted in twelve waves (repetitions once every two weeks) starting on 4 December 2020. The survey is conducted on behalf of the National Institute of Public Health (NIJZ) by the Mediana Institute for Market and Media Research, while the data are analysed by NIJZ.

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

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

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

The report mostly presented data from the **7th wave** of the panel web survey, that took place **from 26 February 2021 to 1 March 2021** on a sample of 1,000 adults aged 18 to 74 years. Some comparisons with previous waves of survey are also shown.

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

- 1st wave: from 4 Dec 2020 to 6 Dec 2020
- 2nd wave: from 18 Dec 2020 to 21 Dec 2020
- 3rd wave: from 4 Jan 2021 to 5 Jan 2021
- 4th wave: from 15 Jan 2021 to 17 Jan 2021
- 5th wave: from 29 Jan 2021 to 30 Jan 2021
- 6th wave: from 12 Feb 2021 to 15 Feb 2021
- 7th wave: from 26 Feb 2021 to 1 Mar 2021

Focus groups

As NIJZ is conducting focus groups on the topic of vaccination against COVID-19 in parallel with the PANDA-SI survey, the section on vaccination presents some results of a focus group discussion with those in favour of vaccination against COVID-19, regarding the impact of the epidemic on their lives. The discussion took place on 18 February 2021.

As part of the School Scheme evaluation, NIJZ conducted a qualitative survey in September 2020, which was also aimed at obtaining information on family meals during the COVID-19 pandemic. Therefore, in the highlighted topic of the 7th wave of the survey: **Changes in diet, physical activity, sleep, and body weight in connection with the COVID-19 syndemic**, some results of conversations with primary school students and their parents are also shown.

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



Indicator	1 st wave (%)	7 th wave (%)
 Use of the protective mask in public <i>(the share of respondents who have complied with the measure in the last 7 days)</i>	95,7	91,2
 Maintaining recommended interpersonal distance in public <i>(the share of respondents who have complied with the measure in the last 7 days)</i>	90,7	86,1
 Hand disinfection when washing is not possible <i>(the share of respondents who have complied with the measure in the last 7 days)</i>	90,6	85,9
 Avoiding a private social event <i>(the share of respondents who have complied with the measure in the last 7 days)</i>	87,4	75,0
 Testing in case of close contact with a person who tested positive for COVID-19 <i>(the share of respondents who would definitely get tested in case they were in contact with someone who tested positive for COVID-19 and would not develop any symptoms themselves)</i>	64,4	65,6
 Intention to get vaccinated against COVID-19 <i>(the share of respondents who will get vaccinated against COVID-19, when it is their turn to get vaccinated)</i>	51,1	52,1
 Avoiding a visit to the doctor due to a problem not related to COVID-19 <i>(the share of respondents who avoided a visit to the doctor in the last 2 weeks due to a non-COVID-19 problem)</i>	35,8	35,7
 Mental health problems <i>(the share of respondents with depressive disorder or mental health problems)</i>	37,5	35,0
 Deterioration of the personal financial situation <i>(the share of respondents who estimated that their financial situation in the last 3 months was worse than before)</i>	31,4	25,8

1st wave: 4 Dec 2020 - 6 Dec 2020 | 7th wave: 26 Feb 2021 - 1 Mar 2021

MAIN RESULTS

Complying with current measures

The vast majority of respondents stated that they had complied with the prescribed measures and recommendations to prevent the transmission of SARS-CoV-2 virus infection in the last 7 days (Figure 1). Of listed measures, respondents mostly comply with the use of a protective mask in public (91.2%) and the least with the disinfection of surfaces (54.9%).

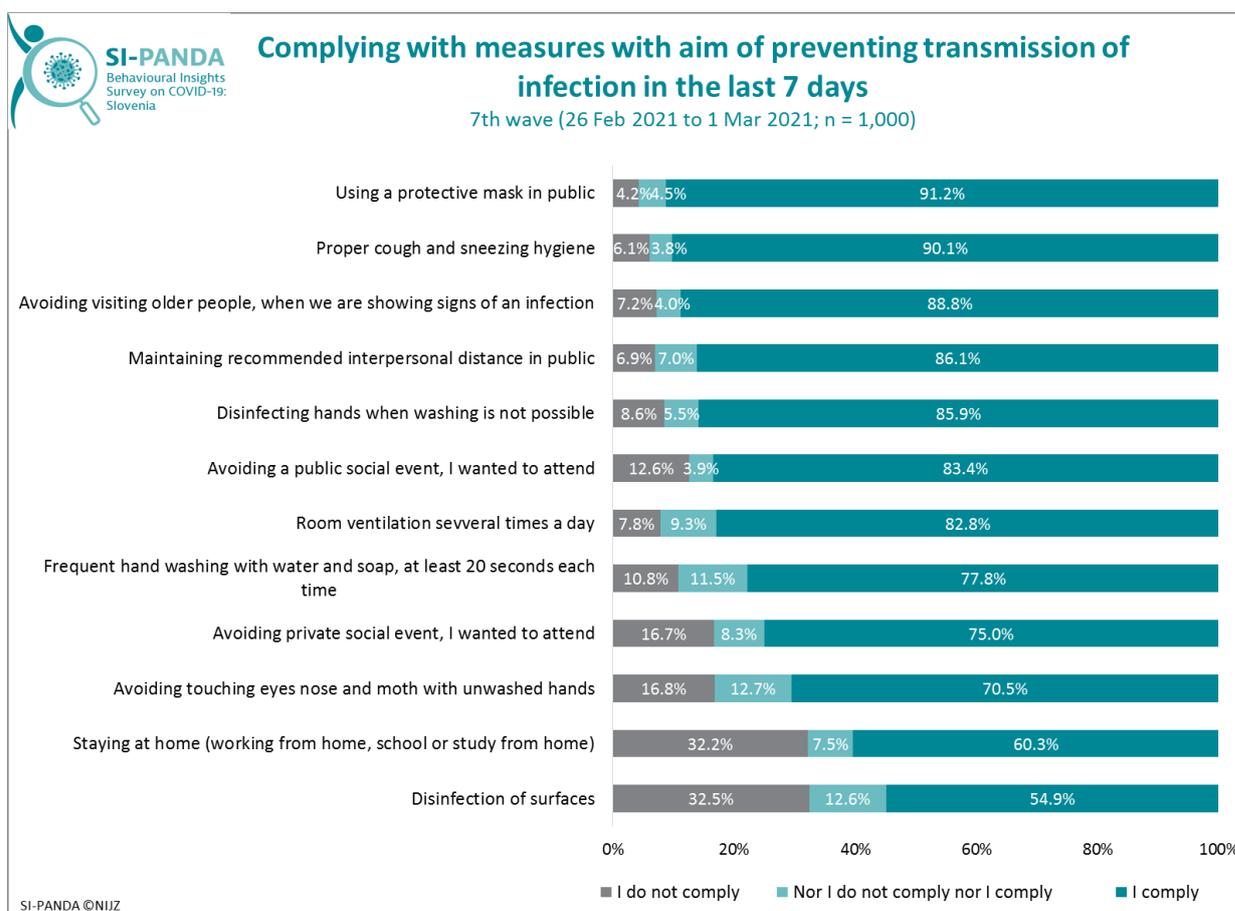


Figure 1: Complying with measures with aim of preventing transmission of infection in the last 7 days, total.

If we compare the results of individual waves of survey, the use of a protective mask in public was the most considered measure through all waves (Figure 2). In the last, 7th wave of survey, a decline in compliance with all measures is seen, with the exception of maintaining interpersonal distance in public. This could be attributed in part to an increase in the proportion of the population who had already recovered or been vaccinated against COVID-19, as well as to the fact that the number of newly infected people in the country began to decline and measures began to be relaxed, which probably had impact on reduced caution in people.

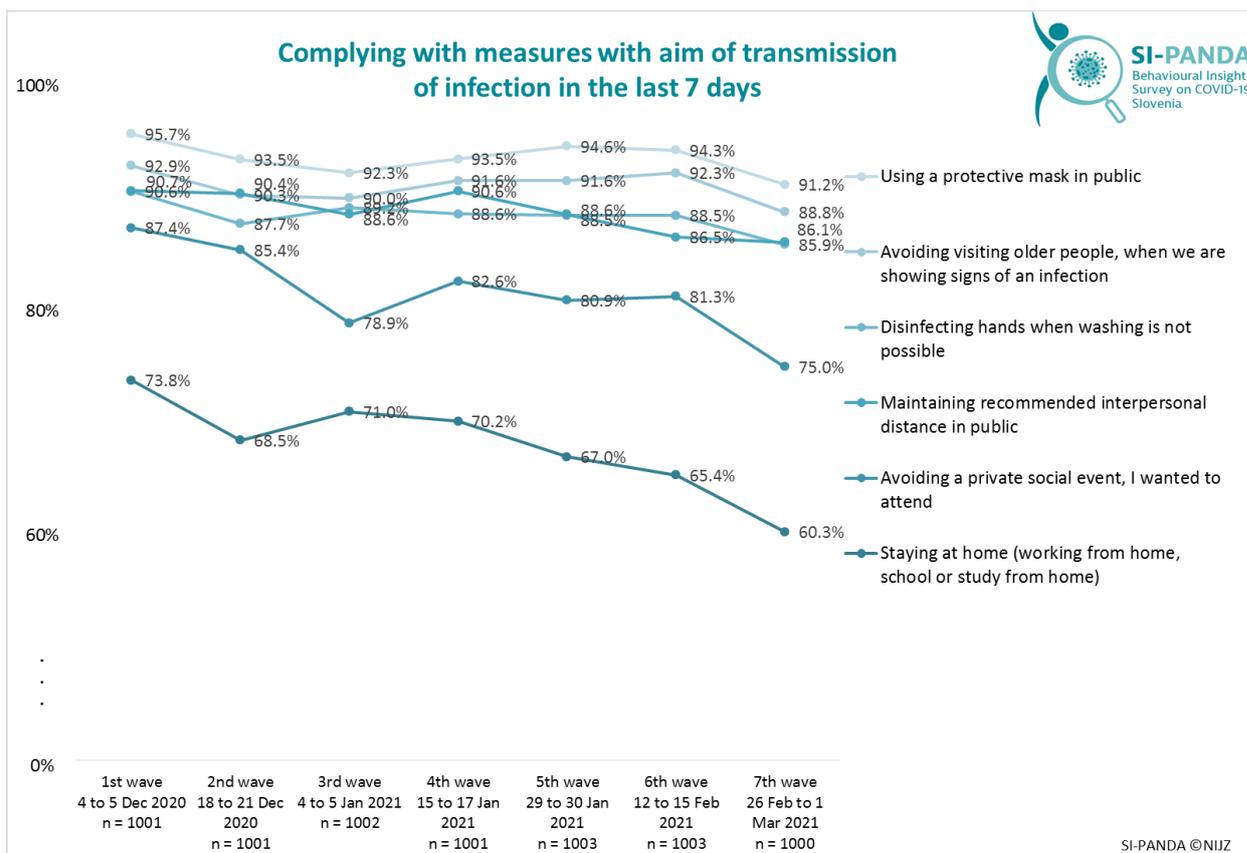


Figure 2: Complying with some measures with aim of preventing transmission of infection in the last 7 days, in total, by survey waves.

One of the important hygiene measures to prevent the spread of SARS-CoV-2 is room ventilation. Most respondents (66.1%) think that information on the importance of effective indoor ventilation is sufficiently emphasized, most of them are in the age group of 65 to 74 (83.3%) and the least in the age group of 18 up to 29 years (51.2%) (Figure 3). The largest share of people who agree that information on the importance of effective ventilation is sufficiently emphasized is among respondents living in rural areas (70.4%).

Information on the importance of the effective indoor ventilation is sufficiently emphasised

7th wave (26 Feb to 1st Mar 2021; n = 1,000)

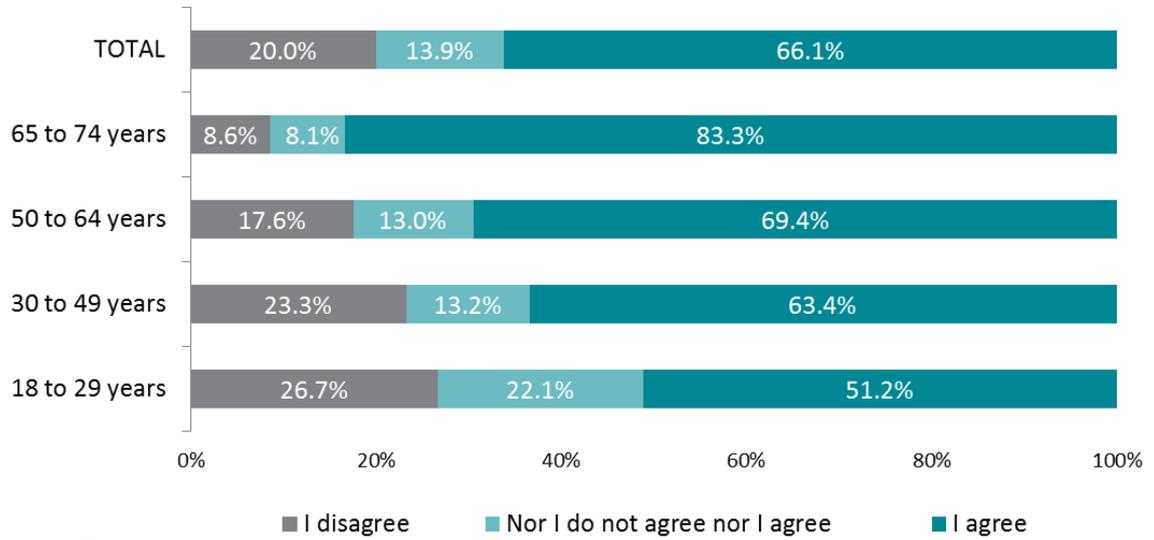


Figure 3: Opinion on the emphasis of information on the importance of effective indoor ventilation, total and by age groups.

Supporting the measures currently in force

Measures to prevent and limit the spread of SARS-CoV-2 virus are very diverse, varying slightly between individual waves of survey, and have received very different support. Between the two that were in force throughout the observed period, respondents in the 7th wave most supported the mandatory use of masks on outdoor surfaces, when it is not possible to provide interpersonal distance of at least 2 metres (62.5%), and less support was subject to limiting the operation of restaurants to delivery or take out (31.3%). According to individual waves of survey and compared to 1st wave, there is a decline in support for both measures (Figure 4).

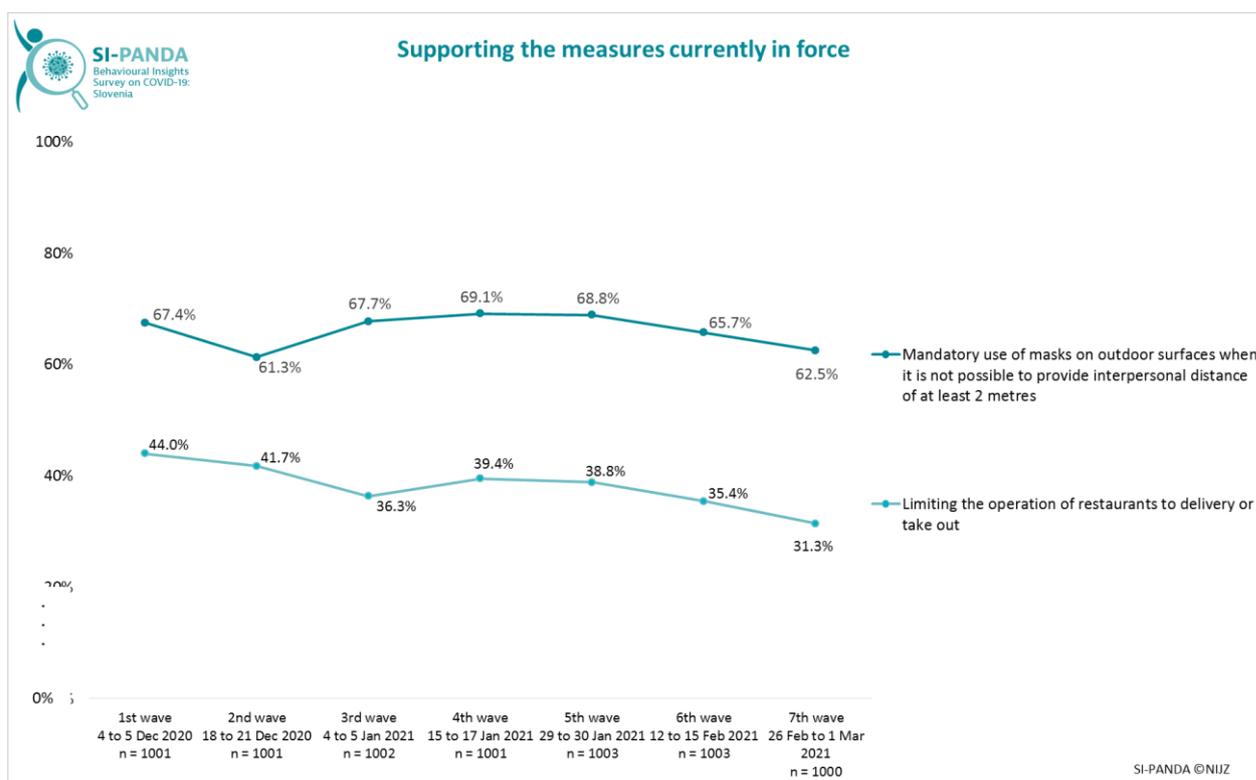


Figure 4: Supporting some of measures currently in force, in total, by survey waves.

In the 7th wave of the survey, we also asked respondents to what extent they support measures related to SARS-CoV-2, which came into force on Monday, 15 February 2021. The highest support was achieved by the support for opening of schools for primary and final-year secondary students (83.7%), followed by the lifting of the ban on crossing municipal borders (80.5%) (Figure 5). Respondents support the restriction of outdoor movement between 9 pm and 6 am the least – only a third of people (26.6%) supports this measure. Regular testing of employees in shops and services is most supported by older respondents – in the age group of 65 to 74 years, a total of 65.9% are supporting this type of testing. This age group also supports regular testing of teachers and educators in the largest share (72.7%), which could be explained by their assumptions that they would come into contact with the infection through grandchildren who attend kindergartens and schools.

Supporting the measures currently in force

7th wave (26 Feb to 1 Mar 2021; n = 1,000)

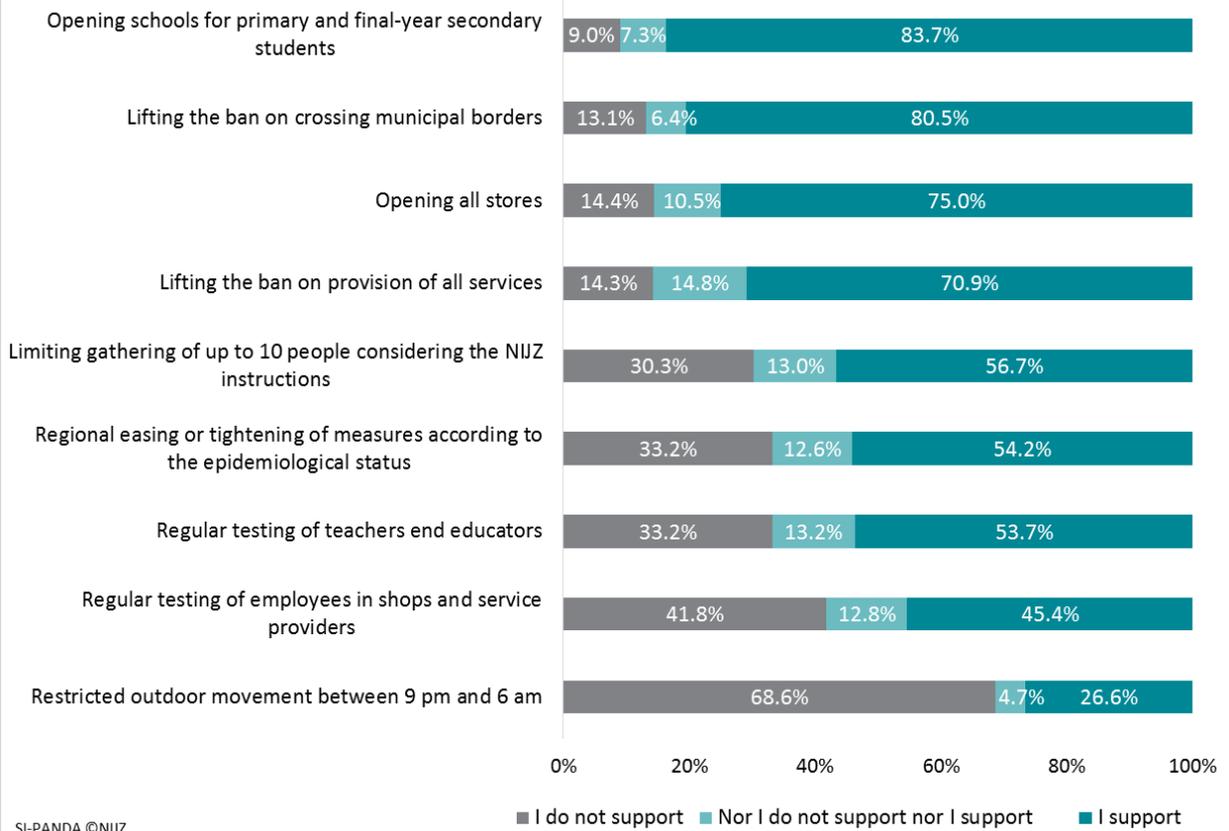


Figure 5: Supporting the measures currently in force, in total.

Trust in persons and institutions to manage the pandemic adequately

Respondents trust their personal physicians the most in terms of proper pandemic management – the average confidence on the 7-point scale in the 7th wave is 5.5. This is followed by trust in hospitals with an average of 5.1 and trust in employers with an average of 4.6 (Figure 6). If we compare the individual waves of survey, for the most part there was no increase or decrease in trust, only a minimal decrease in trust in hospitals, the Ministry of Health, and the Police.

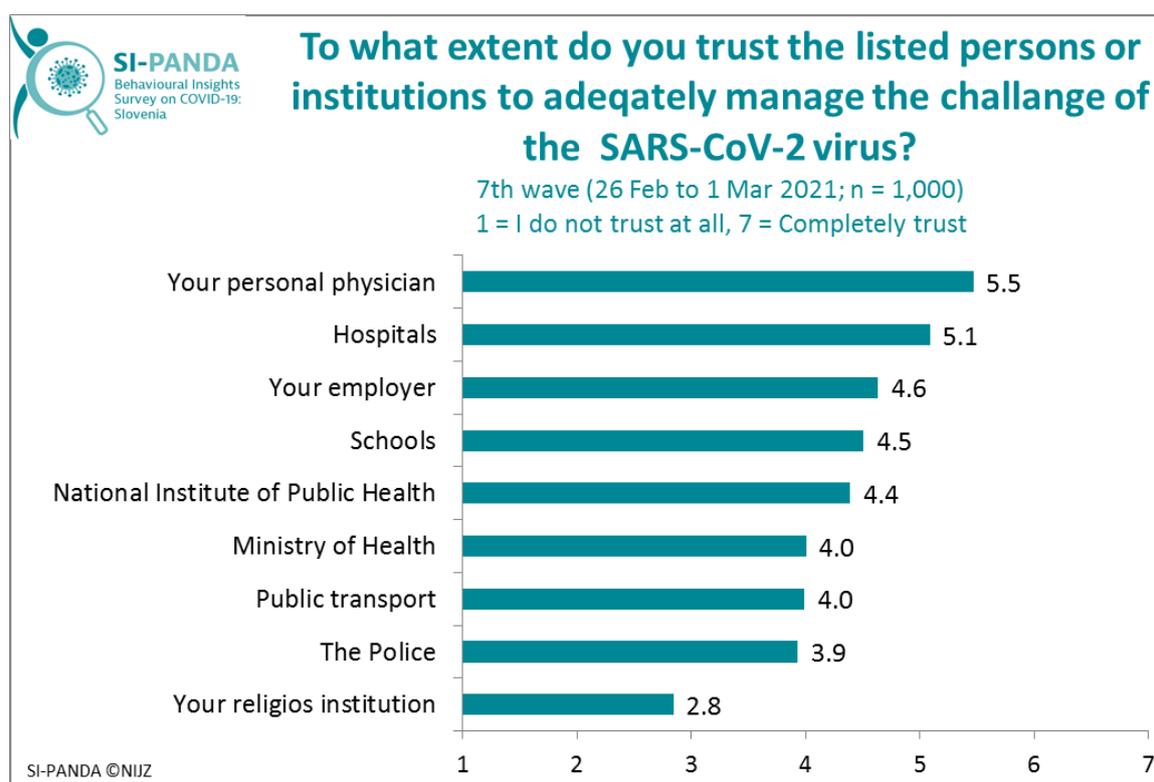


Figure 6: Trust in persons and institutions to manage pandemic adequately, in total.

Vaccination

Two thirds (66.3%) of respondents believe that the COVID-19 vaccine can help curb the spread of SARS-CoV-2. Younger people are more sceptical about the vaccine compared to older people (Figure 7).

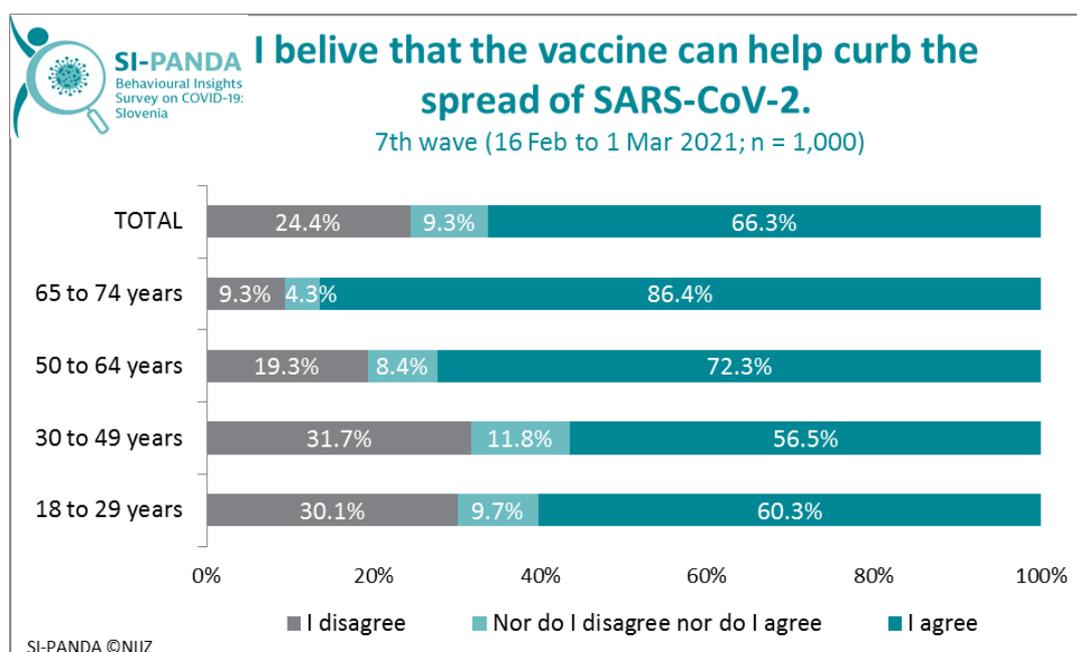


Figure 7: Opinion on whether the vaccine can help curb the spread of SARS-CoV-2, in total and by age groups.

If we compare the different waves of the survey, the proportion of people in 7th wave who believe that the vaccine against COVID-19 can help curb the spread of SARS-CoV-2 is not significantly different from previous waves and is 66.3% (Figure 8).

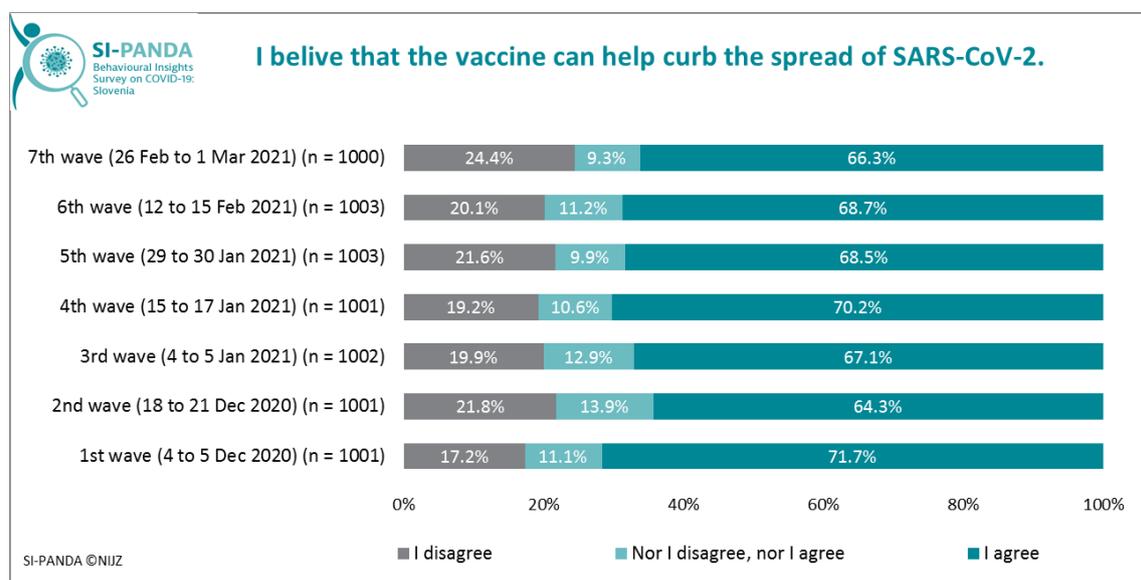


Figure 8: Opinion on whether the vaccine can help curb the spread of SARS-CoV-2, in total, by survey waves.

More than half (52.1%) of respondents intend to be vaccinated against SARS-CoV-2 when the vaccine is available for them. According to the individual waves of the survey, the intention to vaccinate decreased compared in the 2nd and 3rd wave to the 1st wave but rose again from the 4th wave on (Figure 9).

In the last four waves of the survey, more than half of the respondents agree that they will be vaccinated against COVID-19 when the vaccine is available for them, which is more than in the first three waves of the survey. Data from the last four waves, both the view that the COVID-19 vaccine can help curb the spread of SARS-CoV-2, and the respondents' view that they will be vaccinated against SARS-CoV-2 once the vaccine is available, indicate that public opinion has somehow settled at a good half of people.

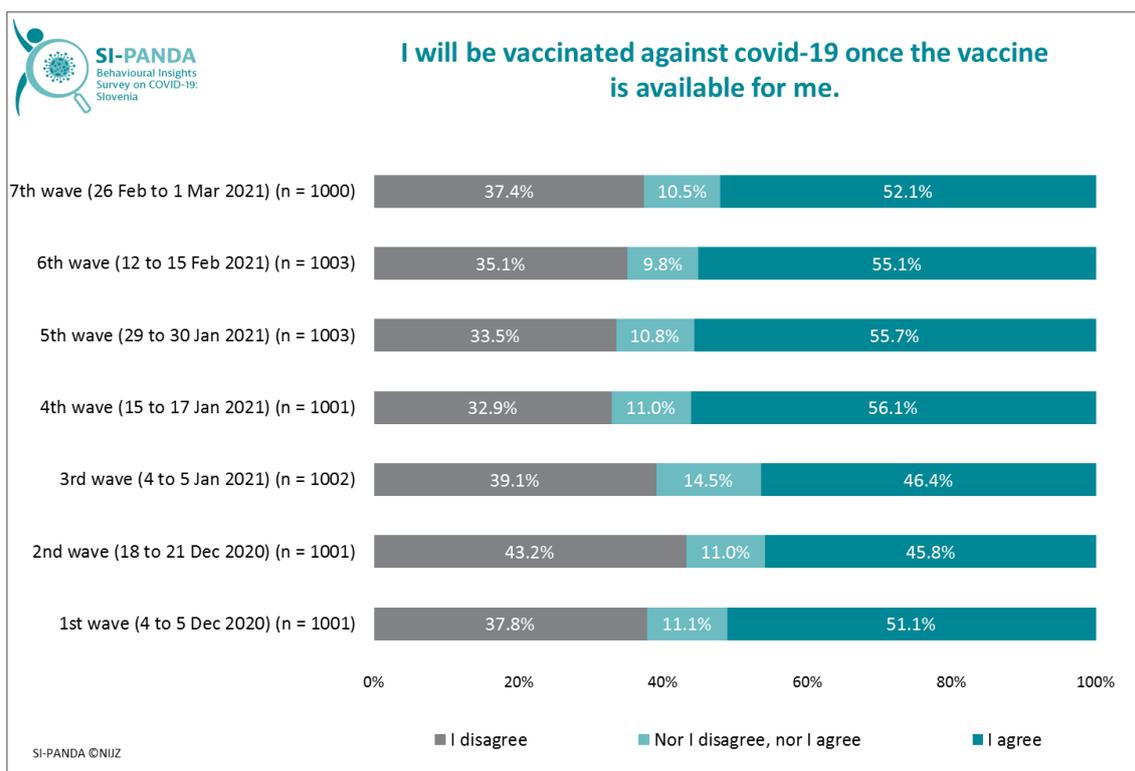


Figure 9: Intention to get vaccinated against COVID-19, in total, by survey waves.

The intention to get vaccinated increases with age (Figure 10). As expected, it is the highest in the age group 65 to 74, where more than three quarters of respondents (76.0%) are determined to be vaccinated. More men (58.1%) than women (45.6%) intend to get vaccinated (Figure 11).

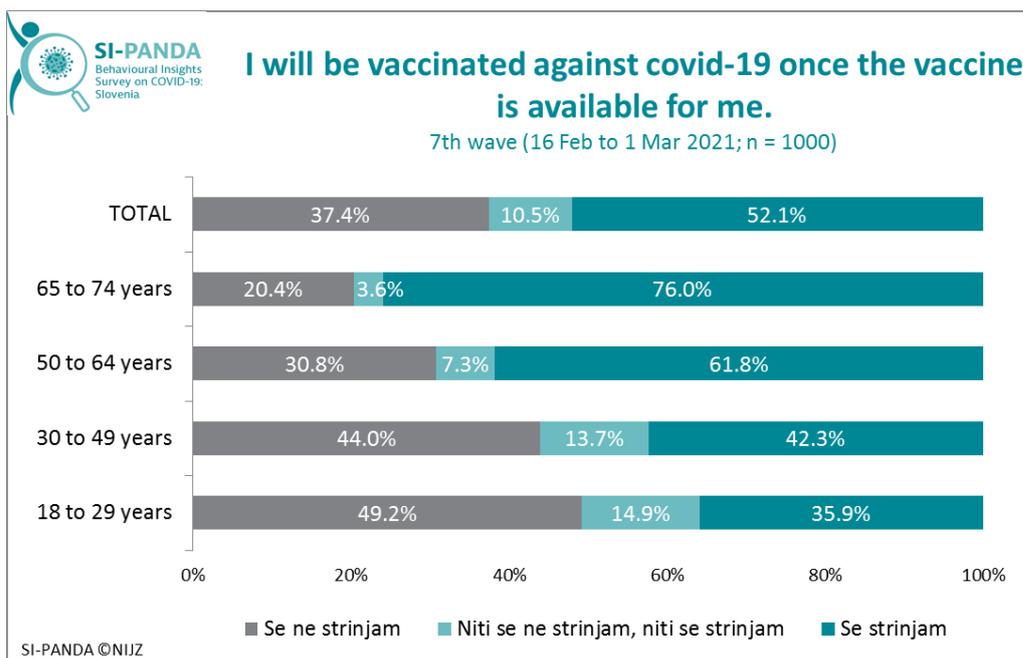


Figure 10: Intention to get vaccinated against COVID-19, in total and by age groups.

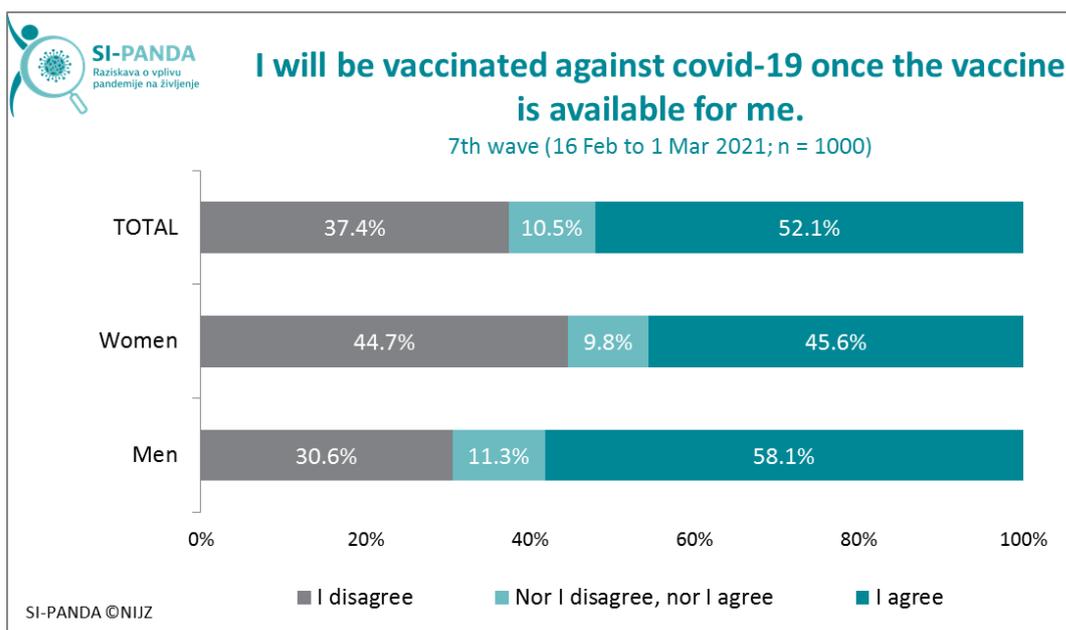


Figure 11: Intention to be vaccinated against COVID-19, in total and by gender.

Among people with chronic diseases, 65.2% plan to get vaccinated.

When asked what the decision to get vaccinated will depend on, respondents most agree, on average, that their decision will depend on the following factors:

- Whether sufficient data will be available that the vaccine is safe (in the 7th wave, the average value on the 7-point scale is 5.3);
- Whether sufficient data will be available that the vaccine is effective (5.3);
- Whether the vaccine has been in use for a long time (4.8);
- Recommendations from personal physician (4.4) (Figure 12).

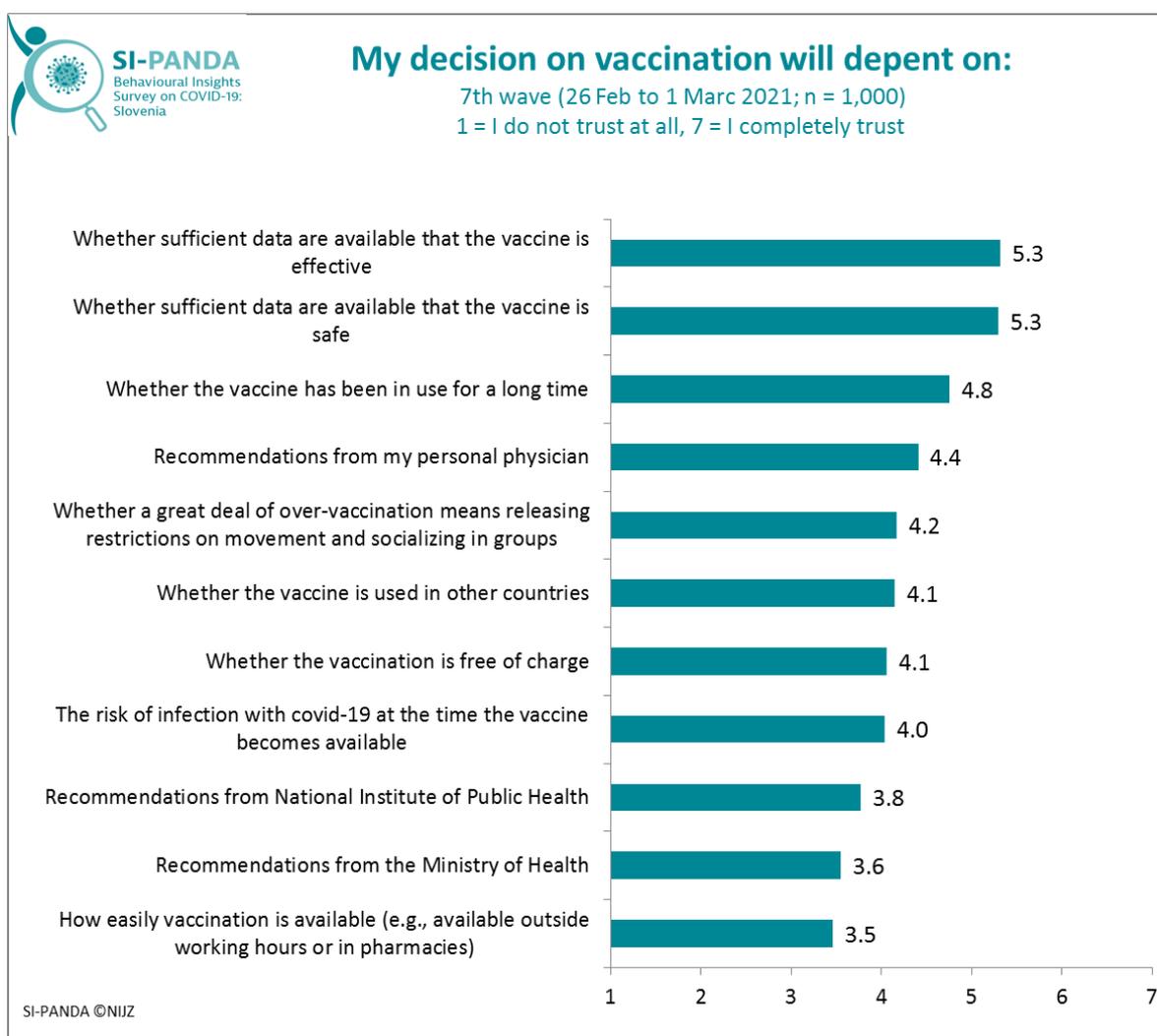


Figure 12: Reasons for decision on vaccination, in total.

Results of a focus group with a group of people in favour of vaccination against COVID-19: Life during the epidemic

In the framework of the project entitled *Measures in the field of COVID-19 spread management with an emphasis on vulnerable groups*, in Work Package 3, a qualitative research with some key target groups is carried out using the focus groups method. The aim of Work Package 3: *Dissemination* is to ensure the comprehensive and continuous dissemination of key information, materials, and activities to the general public with a focus on vulnerable groups.

In the focus group, which was carried out with the population of Slovenia who are in favour of vaccination against COVID-19, we checked, among other things, how the epidemic affected their lives.

Participants said that the epidemic has had the greatest impact on their social life, as everyone adheres to the measure of limiting contact with other people. This measure is easier to comply with for those focus group participants who live with their families than for those who live alone, so the latter occasionally encounter people outside their households and thus accept the risk of infection. Participants also mentioned to a large extent that they miss trips and travels, as they travelled quite often before the epidemic.

A few focus group participants cited changes in shopping habits due to the epidemic – they now make most of their purchases online or buy food on nearby farms; those who still buy food in stores now do so less frequently and prudently and buy more food for longer periods of time.

Participants also mentioned changes in physical activity – some no longer attend exercises they did before the pandemic, and their children no longer participate in organized sports activities. However, some now go for walks in nature more often.

The participants mostly did not feel the changes in the financial situation, one of the participants, who has their own business considers that the country has provided significant financial support to the self-employed with a basic income.

Among other changes, the participants also mentioned reduced access to health services or the fact that it was necessary to take care of a parent at home after the operation, while in normal circumstances their hospitalization would take longer, and they would be taken care of by medical staff.

As for well-being itself, those participants who have young children stated that the period when kindergartens were closed was quite stressful for them. However, one participant said that relationships in their family even improved during the epidemic because of the time they all spend together.

The impact of the pandemic on lifestyle and bad condition

In the 7th wave of the survey, more than two thirds of respondents (38.8%) stated that they had been less physically active in the last 2 weeks than before the pandemic; 35.7% avoided visiting a doctor due to SARS-CoV-2 unrelated problem; just under a fifth (18.1%) ate more unhealthy foods than before the pandemic; 15.7% of respondents smoked more than before the pandemic; 9.6% of respondents drank more alcohol than before the pandemic; and 8.6% of respondents postponed vaccination for themselves or their child (Figure 13). 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. Minor fluctuations in lifestyle changes are detected in all waves of the survey. In the 7th wave of the survey, there are noticeable changes towards a healthier lifestyle – a lower share of those who are physically less active, lower share of those who eat more unhealthy foods and lower shares of those who smoked more or drank more alcohol than before the pandemic. Perceived changes could be attributed to longer daytime, improved weather, and better opportunities for outdoor activities as well as to winter holidays. At the same time, we have also witnessed the partial release of measures that have enabled greater mobility of people. Reduced intake of unhealthy foods and alcohol could also be attributed to fasting. Additional research would be needed to provide a reasoned interpretation of this trend in the 7th wave.

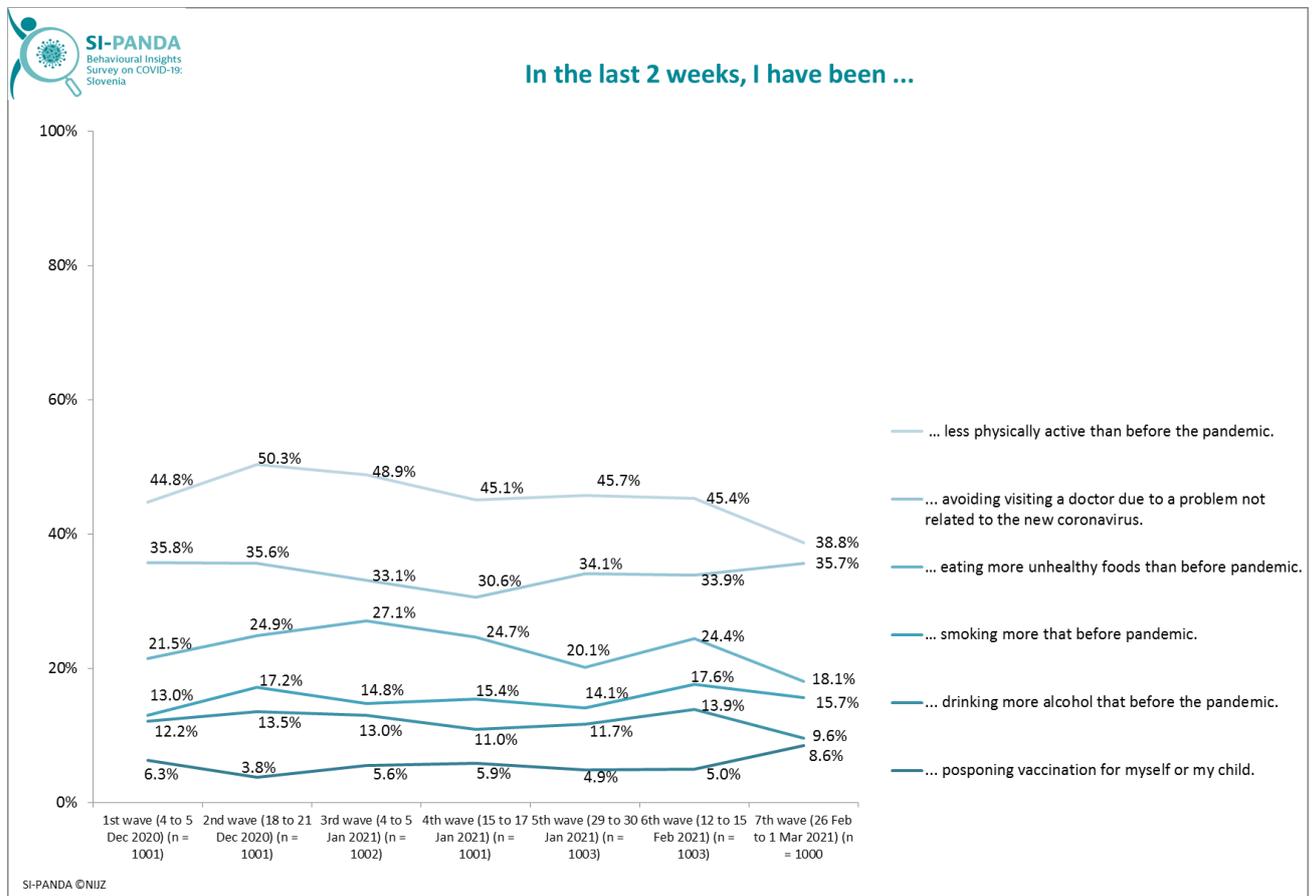


Figure 13: The impact of the pandemic on lifestyle in the last 2 weeks, in total, by survey waves.

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

In the 7th wave, we noticed that the youngest age group of respondents reported the unhealthiest lifestyle habits (Figure 14). Compared to other age groups, they were the least physically active (44.9% of respondents aged 18 to 29) and ate more unhealthy foods than before the pandemic (35.5%). A good fifth (22.7%) of them reported smoking more than before the pandemic, and alcohol consumption during the pandemic was increased by tenth (10.0%) of these respondents. Respondents of the youngest age group are also among those who are more likely to avoid visiting a doctor due to a problem not related to the new coronavirus (38.8%) and to a greater extent decide to postpone vaccination for themselves or their child (11.3%).

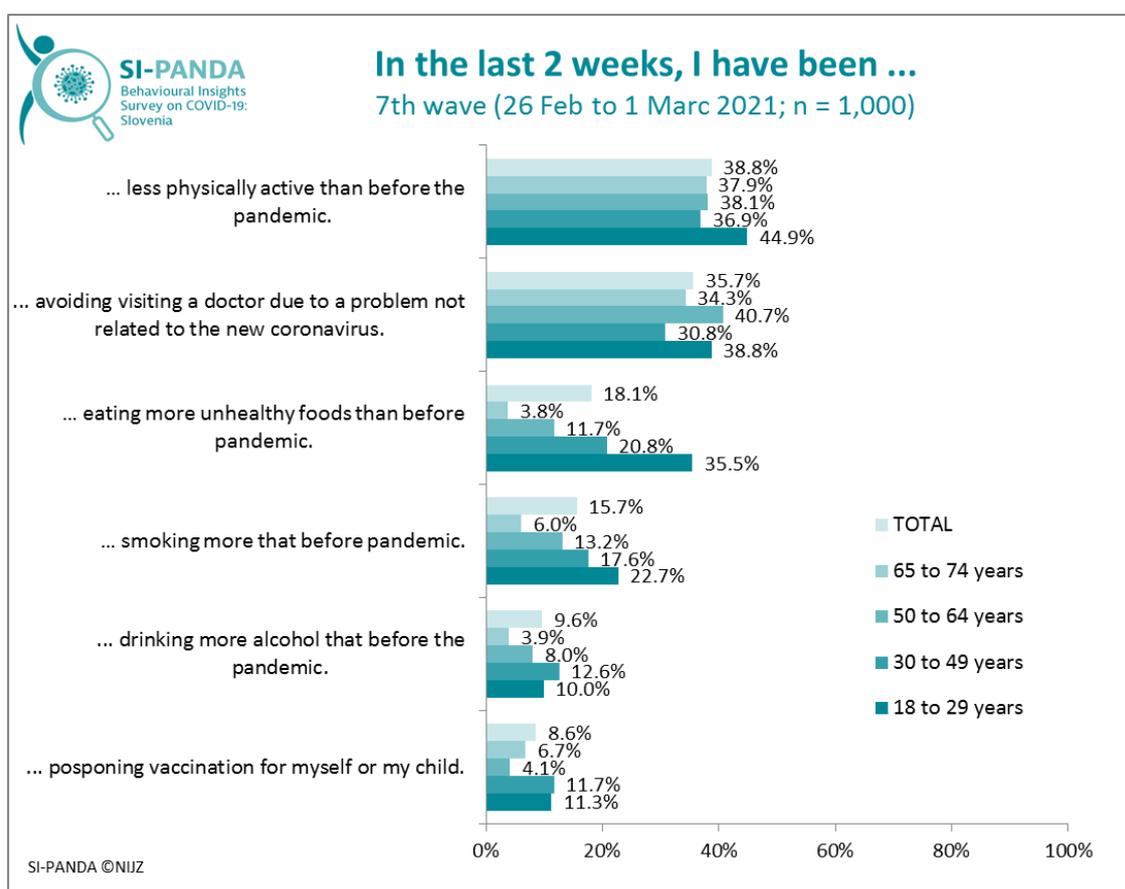


Figure 14: The impact of the pandemic on lifestyle in the last 2 weeks, in total and by age groups.

We also checked for the presence of mental health problems during the pandemic. In the 7th wave of the survey, we found that 20.9% of respondents had mental health problems and 14.1% had signs of depressive disorder. The proportion of people with mental health problems and sign of depressive disorder did not change significantly between the waves of the survey. The youngest age group of respondents (aged 18 to 29) reported the most mental health problems in the 7th wave, with the shares of people with mental health problems (26.2%) and

depressive disorder (17.6%) highest compared to other age groups (Figure 15). This is in line with the predictions that the COVID-19 pandemic affected mainly the older generations, while the consequences of measures to contain it, mainly affected younger generations.

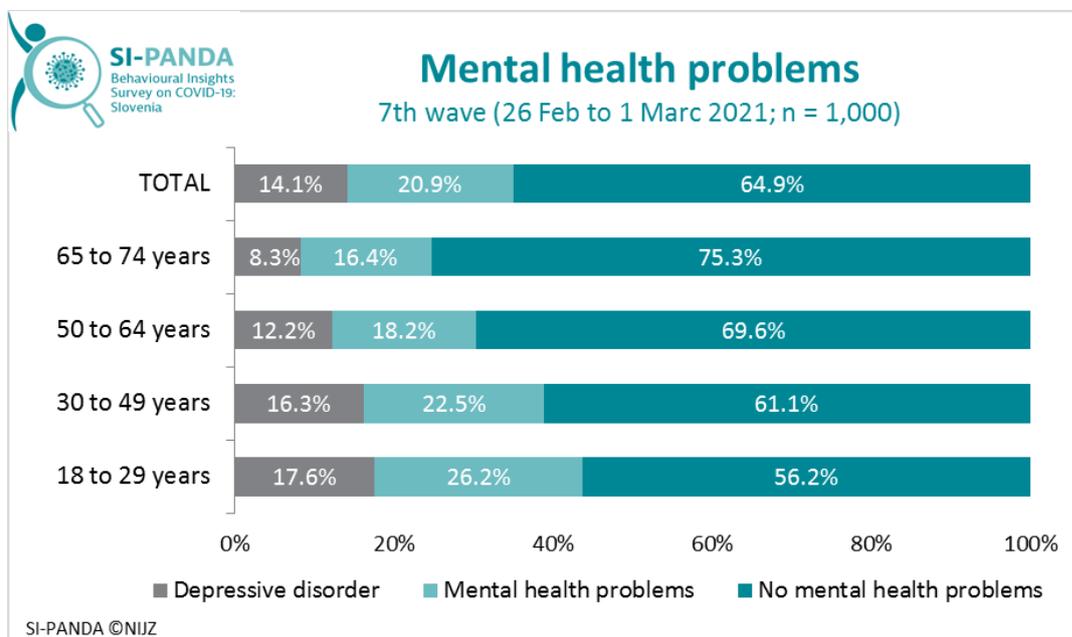


Figure 15: Presence of mental health problems, in total and by age groups.

The impact of the pandemic on financial situation

A quarter (25.8%) of respondents believe that their financial situation in the last 3 months is worse than before. The share of respondents who believe that their financial situation is worse in the last 3 months than before has decreased by 5.6 percentage points compared to the 1st wave of the survey. Respondents, aged 18 to 29, perceive their financial situation the worst (Figure 16), so it will be necessary to pay special social attention to this group also in accordance with the proposed EU programmes for managing the current crisis. Given their employment status, the unemployed and the self-employed perceive their financial situation as bad, which indicates a major public health problem.

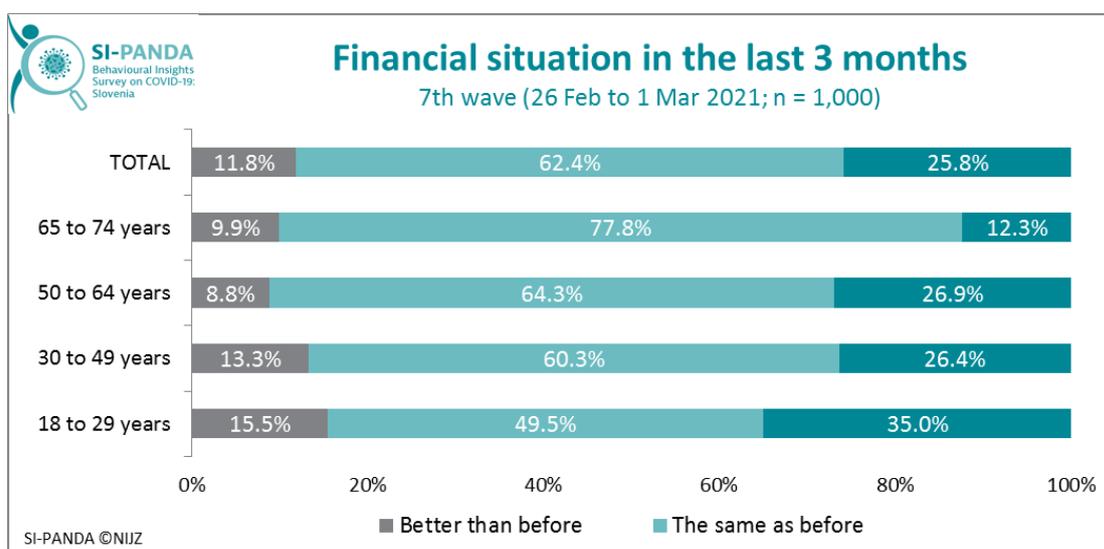


Figure 16: Perception of financial situation in the last 3 months, in total and by age groups.

In terms of gender and education, the financial situation in the last 3 months was perceived as worse by the majority of women with secondary education. To a lesser extent, the financial situation deteriorated for men with college education (Figure 17).

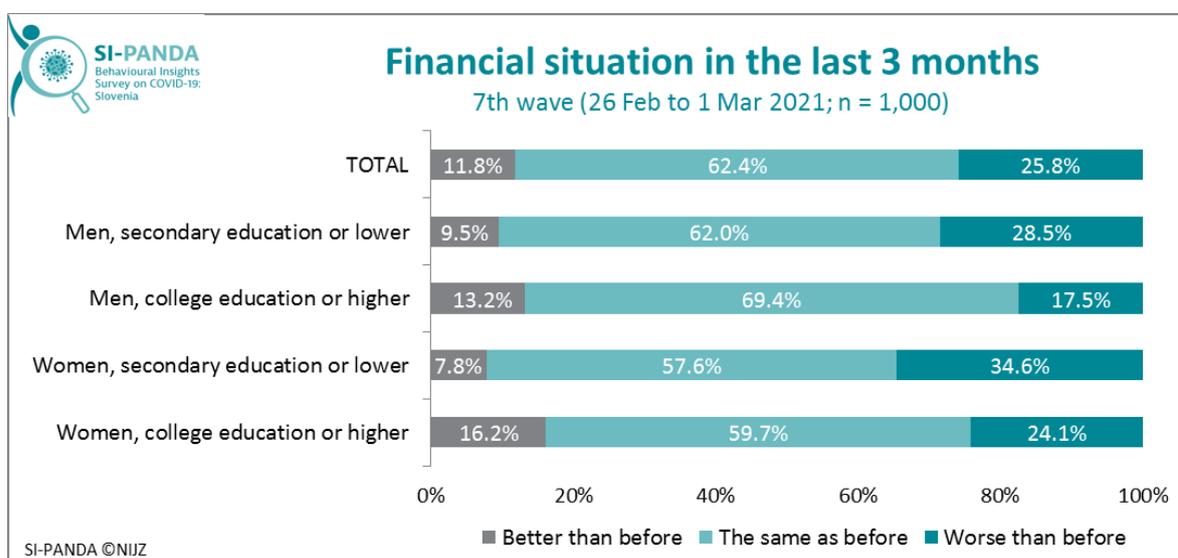


Figure 17: Perception of financial situation in the last 3 months, in total and by gender and level of education.

Highlighted topic of the 7th survey wave: Changes in diet, physical activity, sleep, and body weight in connection with COVID-19 syndemic

COVID-19 is not only a pandemic. COVID-19 is a syndemic³ (several pandemics combined) combined with infodemic. It is made up of two interdependent disease categories, i.e., infectious SARS-CoV-2 and a spectrum of chronic non-communicable diseases with associated risk factors, both characterized by a combined accumulation in vulnerable social groups and an increase in inequality.

In the 7th wave of the PANDA research, we paid special attention to selected lifestyle factors that affect the functioning of the immune system and are associated with chronic non-communicable diseases. These are diet, physical activity, and sleep, and are affected by structural factors associated with measures to curb the COVID-19 pandemic. We were interested in changes in people's behaviour and, above all, in which population groups lifestyle changes are most pronounced, so that we can propose appropriate general and targeted measures to improve the situation based on the findings. In addition, we asked respondents how their body weight changed during the syndemic.

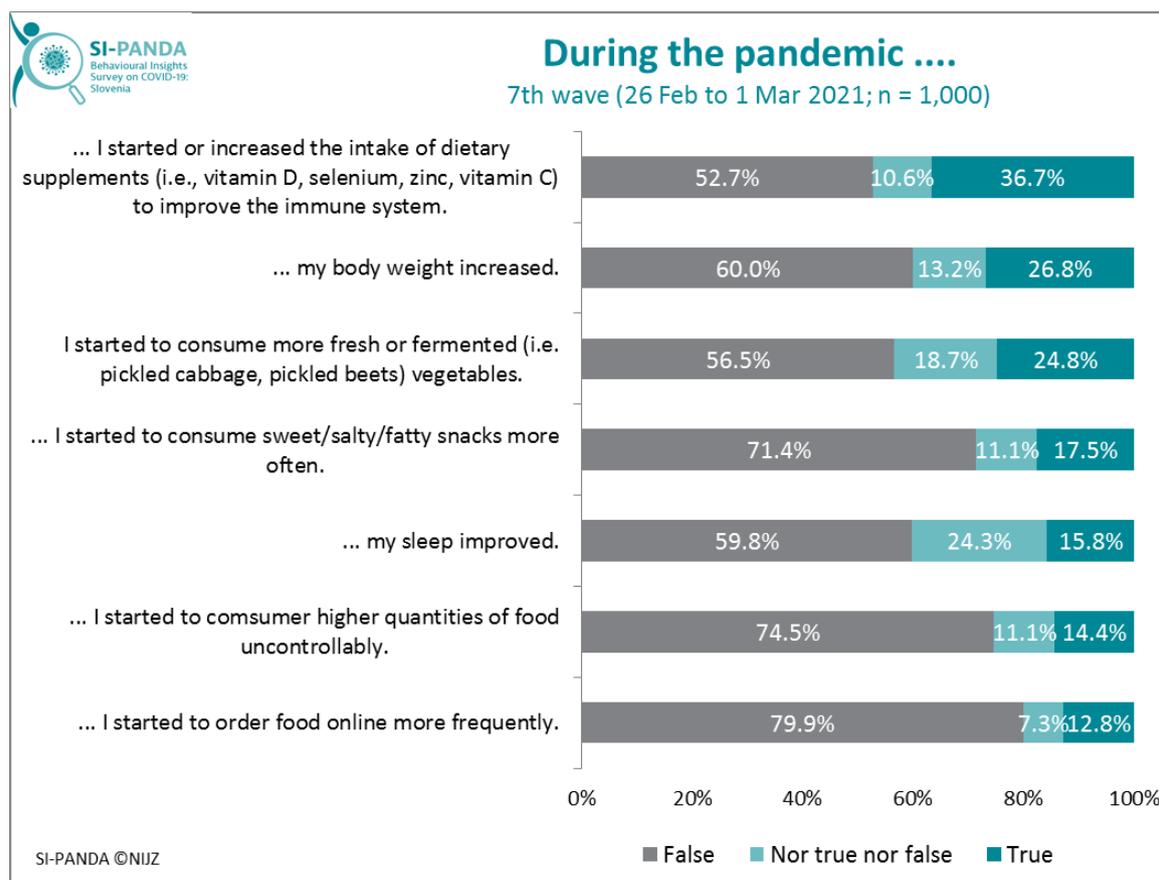


Figure 18: Changes in dietary and exercise habits, sleep, and body weight during the pandemic, in total.

³ [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)32000-6/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32000-6/fulltext).

When asked whether their body weight increased during the pandemic, the majority of respondents (60.0%) (Figure 18) answered no. Almost 27% of respondents reported gaining extra weight, of which 31.3% were women and slightly fewer men (22.7%). Similar findings, as shown by the results of the SI-PANDA survey in adults, were also shown for children by the SLOfit 2020 survey of the Faculty of Sports of the University of Ljubljana and the evaluation of the Children School Scheme measure of the National Institute of Public Health, namely that during the pandemic, the proportion of children with obesity has increased by more than 20%^{4,5}.

Obesity is characterized by the fact that it can worsen the condition of chronic diseases, thus it is also worrying that the body weight has increased in more than a quarter (28.2%) of adults with associated chronic diseases. Of those who reported gaining weight during the pandemic, as many as 34.9% had depressive disorder or other mental health problems (39.9%).

Weight gain can easily be associated with positive energy balance, which mainly depends on the consumption of snacks and uncontrolled food intake and insufficient physical activity. Slightly more than a sixth of respondents (17.5%) started eating sweet, fatty, and salty snacks more often during the pandemic (Figure 18). Regarding age, these are most common among the youngest adults, aged 18 to 29 years, (30.0%) and in the group of persons with assessed depressive disorder (28.5%) or mental health problems (25.9%). The increase in this habit is also indicated in the group of people who assessed their personal financial situation in the last three months before the day of the survey as worse, which could also be due to greater distress of this group of people during the pandemic.

Increased uncontrolled consumption of large amounts of food in connection with the pandemic could also be a “tool” for relieving negative stress (Figure 18), as this habit was started by a seventh of respondents (14.4%). Among the latter, this habit has increased more among persons with assessed depressive disorder (23.8%), persons with mental health problems (22.6%), and in the group of those who live with children under 18 years of age (18.5%).

In addition to fruit, vegetables are an important source of vitamins, minerals, dietary fibre, and other beneficial substances that have a beneficial effect on our health – among other things, they improve the functioning of the immune system and protect us from infectious diseases. Due to their low energy density, vegetables are also useful in maintaining body weight. A quarter of respondents (24.8%) started consuming larger quantities fresh or fermented (pickled cabbage or pickled beets) vegetables during the pandemic (Figure 18), most of them (43.6%) are in the age group of older adults aged 65 to 74 years, women in a higher proportion than men. There are indications that, during the pandemic, this habit also increased in the group of people with chronic diseases, of which 30.7% reported increased consumption of vegetables; further research would make sense (e.g., with focus groups).

During the pandemic, more than a third of respondents (36.7%) increased or started taking dietary supplements containing nutrients that affect the immune system (Figure 18). There are indications that more of such people are in the group of older adults aged 65 to 74 and women in all age groups. The use of dietary supplements in all age groups is recommended only with a

⁴ University of Ljubljana, Faculty of Sports. Decline in physical efficiency and increase in obesity of Slovenian children after the declaration of the COVID-19 pandemic. September 2020. Available from: https://www.slofit.org/Portals/0/Clanki/COVID-19_razvoj_otrok.pdf?ver=2020-09-24-105108-370.

⁵ School Scheme measure database, Questionnaire for primary school students, part 1. School year 2020/21. Data in the publication process. NIJZ 2021.

medical indication and after consultation with a doctor. Uncritical consumption of dietary supplements can have negative health consequences if intakes are exceeded. Especially in the socio-economically more vulnerable population, the purchase of food supplements represents a relatively large financial cost that could be spent on a better-quality mixed diet. Purchases of dietary supplements can deplete the diet, so we do not recommend them without consulting a doctor.

As many as 38.8% of respondents were less physically active in the last 2 weeks than before the pandemic (Figure 14), which is probably due to measures to curb the pandemic. Compared to older groups of respondents, younger adults aged 18 to 29 (44.9%) became less active. A significant decline in physical activity was also observed in chronic patients, where a decline in physical activity was observed in 43.1% of adults, and among persons with depressive disorder, where a decline in physical activity compared to pre-pandemic period was reported by as many as 59.4% of respondents; both are concerning in the long term due to the deterioration or risk of an increase in chronic non-communicable diseases. With decreased physical activity and most frequently unchanged dietary intake, body weight increases and body composition changes. The proportion of muscles in the body decreases and the proportion of fat increases, leading to sarcopenic obesity, which is the most metabolically unfavourable form of obesity. Weight management in this form of obesity in all age groups, and especially in older adults, requires the judgement and involvement of trained medical teams. Various diets for weight management without professional guidance and ongoing measurement of changes in body composition, especially in those over 50, are not recommended.

We also examined the subjective view of sleep quality (Figure 18). The survey showed that in 59.8% of respondents (54.7% of men and 65.3% of women) the quality of sleep deteriorated compared to the period before the pandemic. Respondents who reported poorer sleep experienced more depressive disorders and mental health problems than those who reported maintaining or even improving these aspects of sleep during the pandemic. For a better understanding of the situation in Slovenia in this area and the possibility of action, we propose an additional research review of the possible connection between the areas of sleep and physical activity and the experience of depressive disorders and mental health problems.

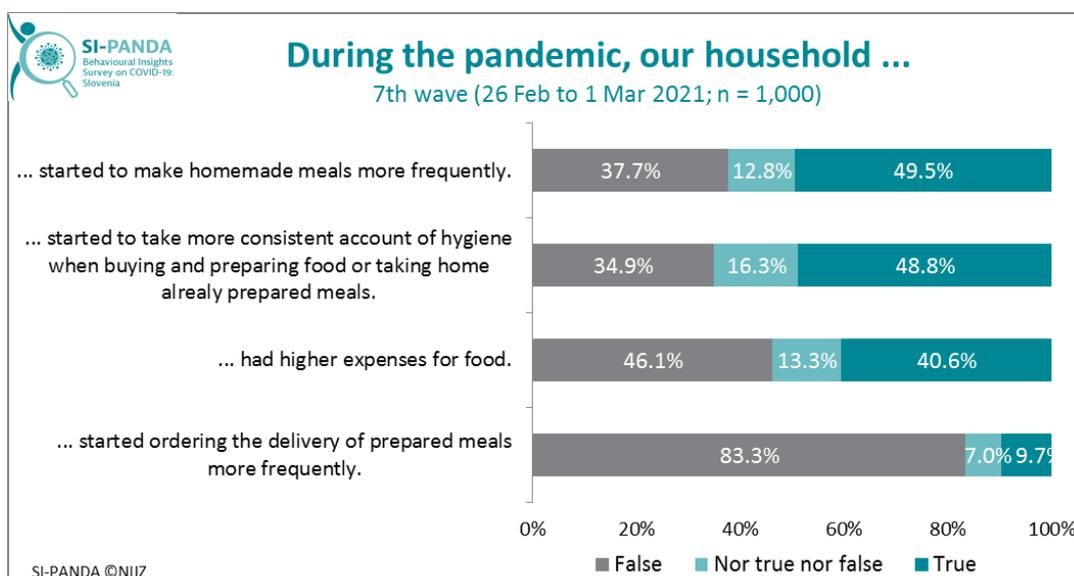


Figure 19: Change in eating habits and change in food costs in the household of the respondent, in total.

Almost half of the respondents (49.5%) report that during the pandemic they started preparing meals more often at home (Figure 19). There are indications that the most of them are among older adults in the age group 65 to 74 years (56.6%). However, the NIJZ⁶ research entitled “Results of focus groups with primary school students and parents on the topic of family meals during the COVID-19 pandemic within the School Scheme measure” showed that the biggest challenge for families with children during a pandemic is preparing at least one meal more than usual. Schools and kindergartens have been closed for the most part of the declared pandemic and working from home also makes less use of the opportunity to eat at work. As family members eat more at home during the pandemic, buying larger quantities of food is also associated with this, leading to increased costs for buying food. Families have also reported spending more time planning meals by finding ideas for new dishes, and they also have more difficulty aligning the desires of children and adults with recommendation on a varied and health diet. Due to many obligations, fast food was also prepared at home. In general, however, families had a regular eating schedule. Children were also more involved in preparing meals than before the pandemic. Those families who prepared and enjoyed snacks often offered fruit, vegetables, or dairy products. Some of the interviewed children also noticed being overweight during the pandemic. The reasons were: stress due to school requirements, large amounts of consumed corn- or some other flakes, consumption of fatty/fried foods and lack of exercise.

The results from the 7th wave of the SI-PANDA survey show that during the pandemic, almost a tenth (9.7%) of respondents reported that they started ordering prepared meals to be delivered to their home (Figure 19). There are indications that most of these are among young adults in the age group 18 to 29 years (17.1%) and in the group of health workers (16.7%), which could indicate that due to their work overload during the pandemic health workers have less time to prepare meals. The survey also indicates that older adults, aged 65 to 74 years (2.6%), ordered take away food the least.

Due to the protection or measures to prevent the transmission of coronavirus, online food supply became more accessible during the pandemic (Figure 19). A good tenth (12.8%) of respondents started ordering food supplies online more often. It is expected that a higher proportion of younger, more educated people and those who are or have been infected with the new coronavirus will decide to do so.

Almost half of the respondents (48.8%) started to follow hygiene more strictly in their household when buying and preparing food (Figure 19). This habit is more pronounced in people over the age of 50 and in those who live with people who belong to the risk group for the new coronavirus.

⁶ School Scheme research, results of focus groups with primary school students and parents on the topic of family meals during the COVID-19 pandemic with the School Scheme measures, NIJZ 2020.

The School Scheme is a measure of the EU's common agricultural policy, which provides children in primary school and institutions for the education of children and adolescents with special needs with a free additional meal of fruit and vegetables and milk and dairy products, whereas the compulsory accompanying educational measures link children with agriculture and promote healthy diet. The provider of the evaluation of the effects of the School Scheme measures is the NIJZ, which incorporates in research e-surveys and qualitative research with some key target groups using the focus group method.

Qualitative research as part of the evaluation of the School Scheme, conducted in September 2020, was also aimed at obtaining information on family meals during the COVID-19 pandemic. Research activities included the implementation of six focus groups. Three focus groups were conducted among parents in rural and urban settings, and three focus groups were conducted among primary school students, also in urban and rural settings. The latter focus groups involved students attending primary schools included in the School Scheme. Due to the measures related to COVID-19, all focus groups were implemented with the help of modern information and communication technology (ZOOM application).

Two-fifths of respondents answered that they had higher food costs in their household during the pandemic (Figure 19), of which more women (47.1%) than men (34.4%). Costs increased characteristically more in the population groups up to the age of 50, where this applies to almost half of the respondents. Food costs for those living with children under the age of 18 also increased to a greater extent (54.7% of respondents living with children under the age of 18 responded thusly), compared to 34.3% of those, who do not have minors in their household. The food cost increased in the largest share for those who answered that they assessed their financial situation in the last three months before the day of the survey as worse than before (58.4%). Those who report a depressive disorder and mental health problems also noticed increase in food costs in their households in comparably high share.

We were also interested in whether the respondents could afford quality protein foods at least once every two days (Figure 20) as these are an important part of a balanced diet and at the same time belong to the more expensive food categories. More than a tenth (11.1%) of respondents report that their household cannot afford a meat or equivalent vegetarian meal at least every other day. There are differences between age groups, with a total of 14.8% aged 50 to 64 (17.6% of men surveyed) and 12.9% aged 18 to 29. The least answers (7.6%) that they cannot afford a meat or equivalent vegetarian meal at least every other day are in the age group 65 to 74 years. The observed age differences may indicate that the syndemic dimensions of the COVID-19 pandemic affect the working population and students more in a financial way due to the measures, which would make sense to research further.

Large differences in the households' ability to purchase a meat or equivalent vegetarian meal at least every other day are also visible by educational status. 16.2% of respondents with secondary education and lower and 6.4% of respondents with higher education and higher cannot afford it. High school and university students most often pointed out the financial problem (14.3%), and there are indications that more than a third of the unemployed have financial problems when buying protein foods at least every other day. Differences can also be detected between the Eastern (13.8%) and Western (8.2%) cohesion regions, which most likely reflects the difference in education and employment status⁷.

⁷ https://www.nijz.si/sites/www.nijz.si/files/publikacije-datoteke/neenakosti_v_zdravju_2018.pdf, p. 16.

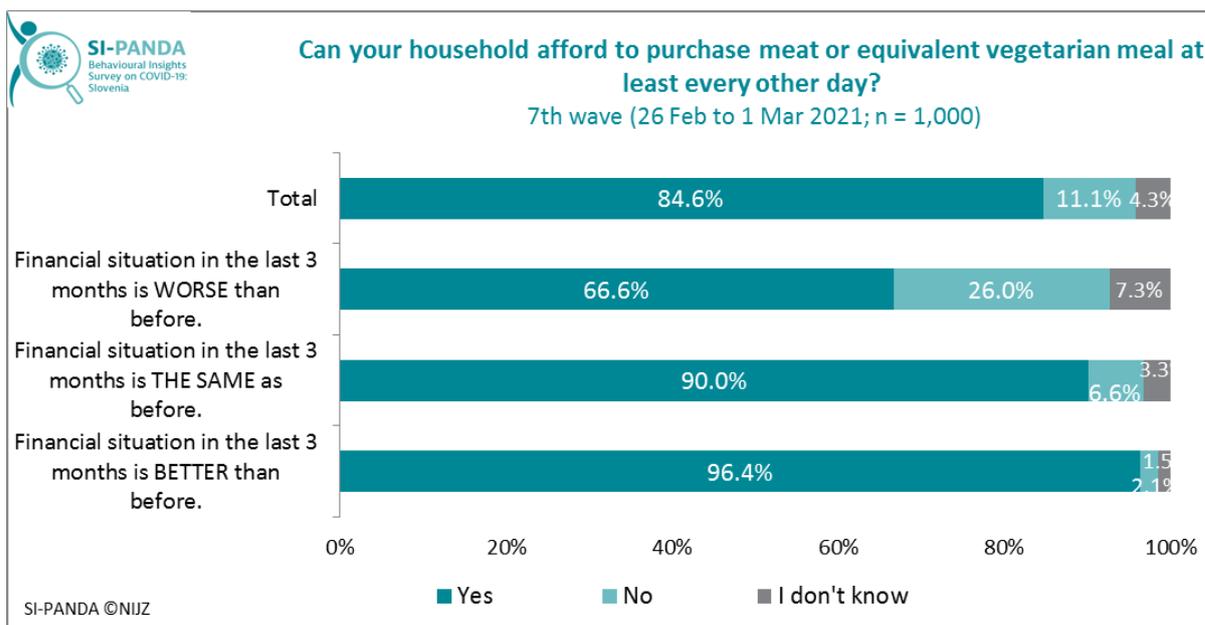


Figure 20: The ability to purchase meat or equivalent vegetarian meal at least every other day, in total and according to the financial situation in the last 3 months.

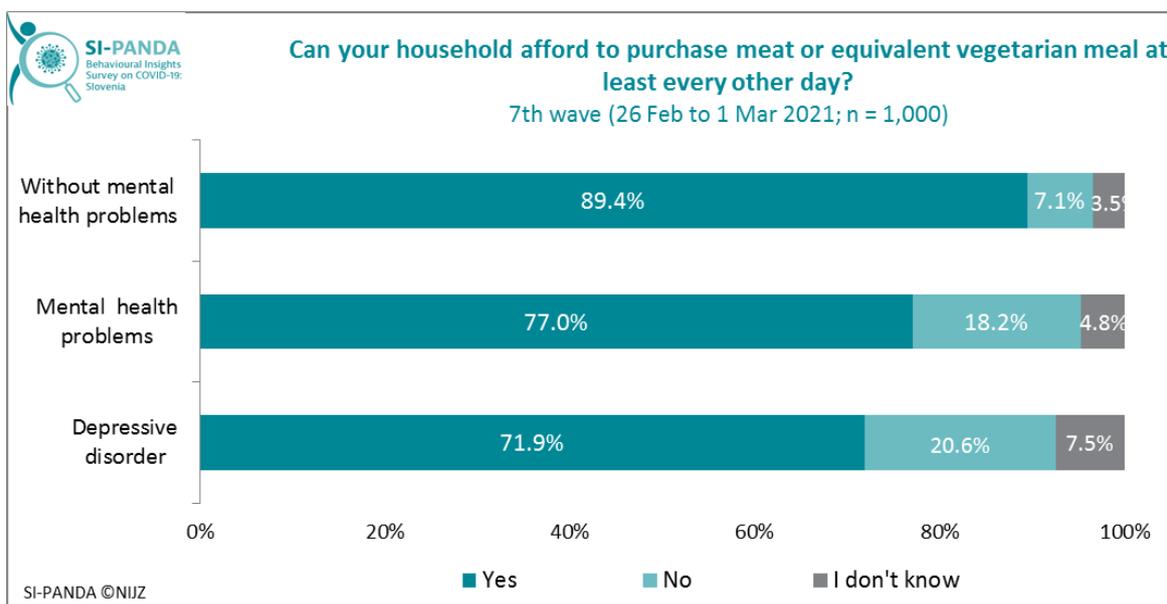


Figure 21: The ability to purchase meat or equivalent vegetarian meal at least every other day, in total and according to the perceived mental health problem or depressive disorder in the last 3 months.

Also 15.9% of those who have a chronic illness and as many as 21.5% of those who live alone cannot afford a meat or equivalent vegetarian meal at least every other day. The highest percentage (26.0%) of those who have problems with the provision of protein foods in the diet is found among those who assess their financial situation in the last 3 months before the day of the survey as worse than before (Figure 20). About one-fifth of those with mental health problems (18.2%) or signs of depressive disorder (20.6%) responded in the same way (Figure 21).

Conclusion of the highlighted topic of the 7th wave

We found that, compared to general population, some population groups perceive bigger changes in diet, physical activity, sleep, and body weight that occurred during the COVID-19 pandemic. These are especially population groups who reported mental health problems or depressive disorder, those with chronic diseases and representatives of the youngest age group as well as those who perceive a worse financial situation in the last three months.

Respondents with mental health problems and people with perceived depressive disorder perceive the most changes. They are more likely to observe increase in their body weight, more frequently consume sweet, fatty, and salty foods, more frequently consume food uncontrollably, are less frequently physically active, more often have poor sleep, more often notice an increase in the cost of food in their household, and more often perceive a financial inability to purchase a meat or equivalent vegetarian meal at least once every other day. Those with chronic diseases are also more likely to perceive weight gain, decreased physical activity, and difficulty providing regular protein meals, while also eating fresh or fermented vegetables more often, which may mean trying to balance change anyway. Respondents of the youngest age group (18 to 29 years) reported less frequent physical activity, a higher proportion of those with increased dietary costs, and a higher proportion of difficulty in providing regular protein meals.

An increase in the cost of food, as well as an increase in the habit of uncontrolled eating, has also been reported by those living with minors. The increase in food costs was also more often felt by women, who also reported more weight gain. Those who live alone are more likely to have difficulty providing regular protein meals. However, respondents who have a worse financial situation in the last three months are more likely to have snacks than before, have more frequent increased food costs and report a greater share of difficulties in providing regular protein meals.

The above-mentioned results point out that in the future Slovenia will also face long-term syndemic consequences of the COVID-19 pandemic – both in the area of lifestyle with conditions for its implementation and in the increase of obesity and in the expected increase in chronic non-communicable diseases, as well as in differences between individual population groups and growing social inequalities.

All identified population groups deserve special attention and additional structural action to be able to approach the recommendations of a healthy lifestyle. As far as the provision of food resources is concerned, the agencies within the UN recommend the introduction of food banks for the most endangered, and there are also many good practices of enabling healthy eating for vulnerable groups, which should be studied and introduced into our region as soon as possible. Especially since we perceive new vulnerabilities in population groups that have been particularly affected by measures to curb the pandemic and have not been socio-economically vulnerable before the pandemic.

At the same time, those with mental health problems and those who already have chronic diseases have the most problems with increasing obesity and decreasing physical activity. Therefore, the operation of preventive activities in the primary healthcare system is necessary and needs to be re-established as soon as possible. Preventive healthy lifestyle programmes for various population groups have been suspended with measures to curb the epidemic, and staff has been redeployed to pandemic management tasks. Prevention of chronic non-

communicable diseases is particularly important, as research and data on morbidity and mortality show that patients with chronic diseases are most at risk for more severe COVID-19 disease and increased mortality. By stopping preventive activities, we are increasing the proportion of high-risk chronic patients and increasing the negative consequences of the COVID-19 pandemic, as the syndemic management approach points out.



National Institute of Public Health

Trubarjeva 2, 1000 Ljubljana

Telephone: + 386 1 2441 400

E-mail: info@nijz.si

Materials available at: <http://www.nijz.si>

