



# COVID-19 PANDEMIC IN SLOVENIA

**Results of a panel online survey on the impact  
of the pandemic on life (SI-PANDA)  
8<sup>th</sup> wave**

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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 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 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 Organization<sup>1</sup> that countries regularly conduct qualitative and quantitative population surveys, which should serve as the basis for further action.

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<sup>1</sup> <https://apps.who.int/iris/bitstream/handle/10665/335820/WHO-EURO-2020-1160-40906-55390-eng.pdf>

## METHODOLOGY

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

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

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

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

The report mostly presented data from the **8<sup>th</sup> wave** of the panel web survey, that took place **from 12 March 2021 to 15 March 2021** on a sample of 1,002 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:

- 1<sup>st</sup> wave: from 4 Dec 2020 to 6 Dec 2020
- 2<sup>nd</sup> wave: from 18 Dec 2020 to 21 Dec 2020
- 3<sup>rd</sup> wave: from 4 Jan 2021 to 5 Jan 2021
- 4<sup>th</sup> wave: from 15 Jan 2021 to 17 Jan 2021
- 5<sup>th</sup> wave: from 29 Jan 2021 to 30 Jan 2021
- 6<sup>th</sup> wave: from 12 Feb 2021 to 15 Feb 2021
- 7<sup>th</sup> wave: from 26 Feb 2021 to 1 Mar 2021
- 8<sup>th</sup> wave: from 12 Mar 2021 to 15 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 discussion with those in favour of vaccination against COVID-19, regarding the impact of the epidemic on their lives and wellbeing. The discussions were held on 11<sup>th</sup> February 2021 (undecided) and 12<sup>th</sup> March 2021 (against vaccination).

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

# SUMMARY OF THE SURVEY



Indicator	1 <sup>st</sup> wave 4.-6. 12. 2020 (%)	8 <sup>th</sup> wave 12.-15. 3. 2021 (%)
 <b>Use of the protective mask in public</b> <i>(the share of respondents who have complied with the measure in the last 7 days)</i>	95.7	90.3
 <b>Maintaining recommended interpersonal distance in public</b> <i>(the share of respondents who have complied with the measure in the last 7 days)</i>	90.7	83.2
 <b>Hand disinfection when washing is not possible</b> <i>(the share of respondents who have complied with the measure in the last 7 days)</i>	90.6	85.2
 <b>Avoiding a private social event</b> <i>(the share of respondents who have complied with the measure in the last 7 days)</i>	87.4	72.7
 <b>Testing in case of close contact with a person who tested positive for COVID-19</b> <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	63.8
 <b>Intention to get vaccinated against COVID-19</b> <i>(the share of respondents who will get vaccinated against COVID-19, when it is their turn to get vaccinated)</i>	51.1	49.2
 <b>Avoiding a visit to the doctor due to a problem not related to COVID-19</b> <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	27.7
 <b>Mental health problems</b> <i>(the share of respondents with depressive disorder or mental health problems)</i>	37.5	28.6
 <b>Deterioration of the personal financial situation</b> <i>(the share of respondents who estimated that their financial situation in the last 3 months was worse than before)</i>	31.4	29.5

# 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 (90.9%) and the least with the disinfection of surfaces (56.4%).

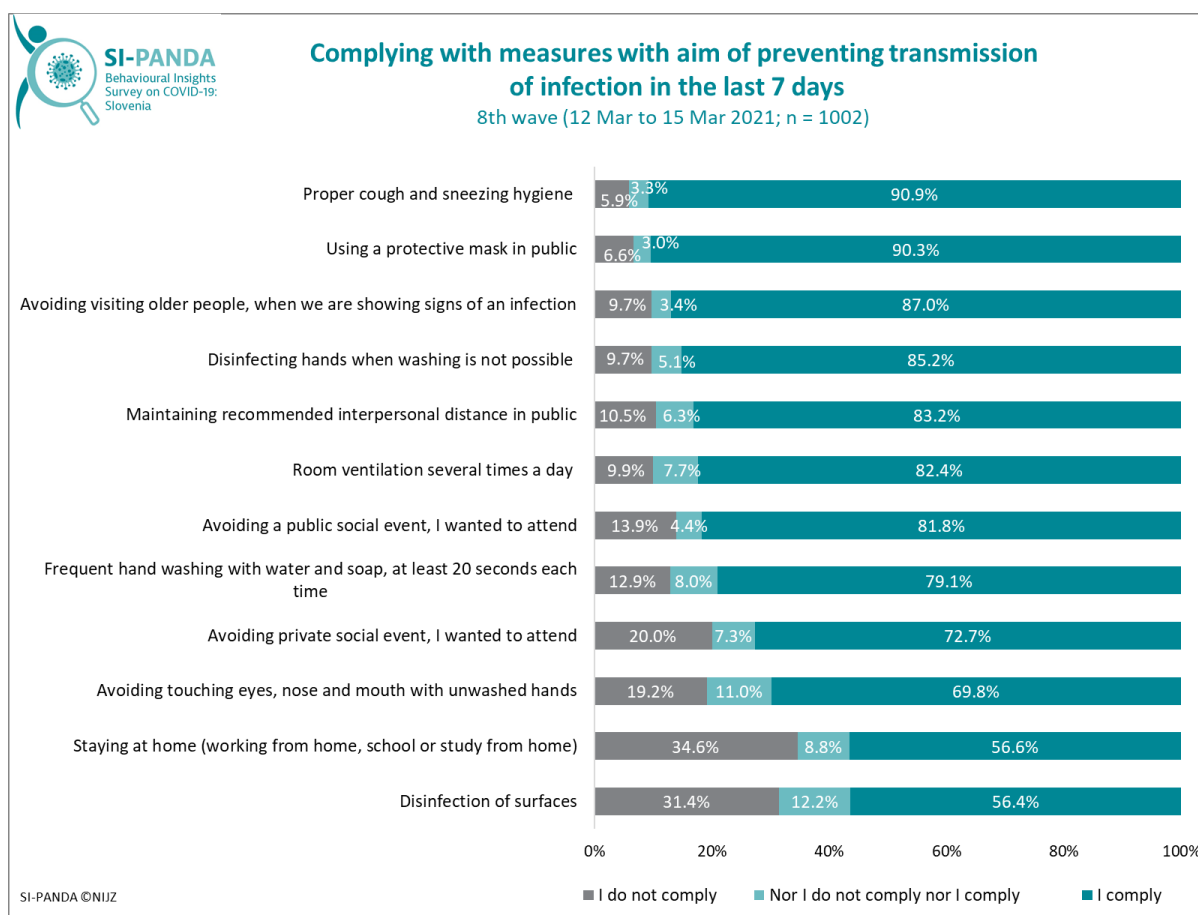


Figure 1: Complying with measures with aim of preventing transmission of infection in the last 7 days, total.

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 7<sup>th</sup> and 8<sup>th</sup> wave of the survey, a decline in compliance with most measures is noticeable, with the exception of room ventilation several times a day. 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. Due to the upcoming warmer days, we have more opportunities to ventilate the rooms, which probably contributed to

compliance with this measure. Despite the declining proportion of people who have complied with the measures in the last 7 days, a proportion of people who would certainly be tested if they were in contact with someone who tested positive for COVID-19 remains stable through individual waves.

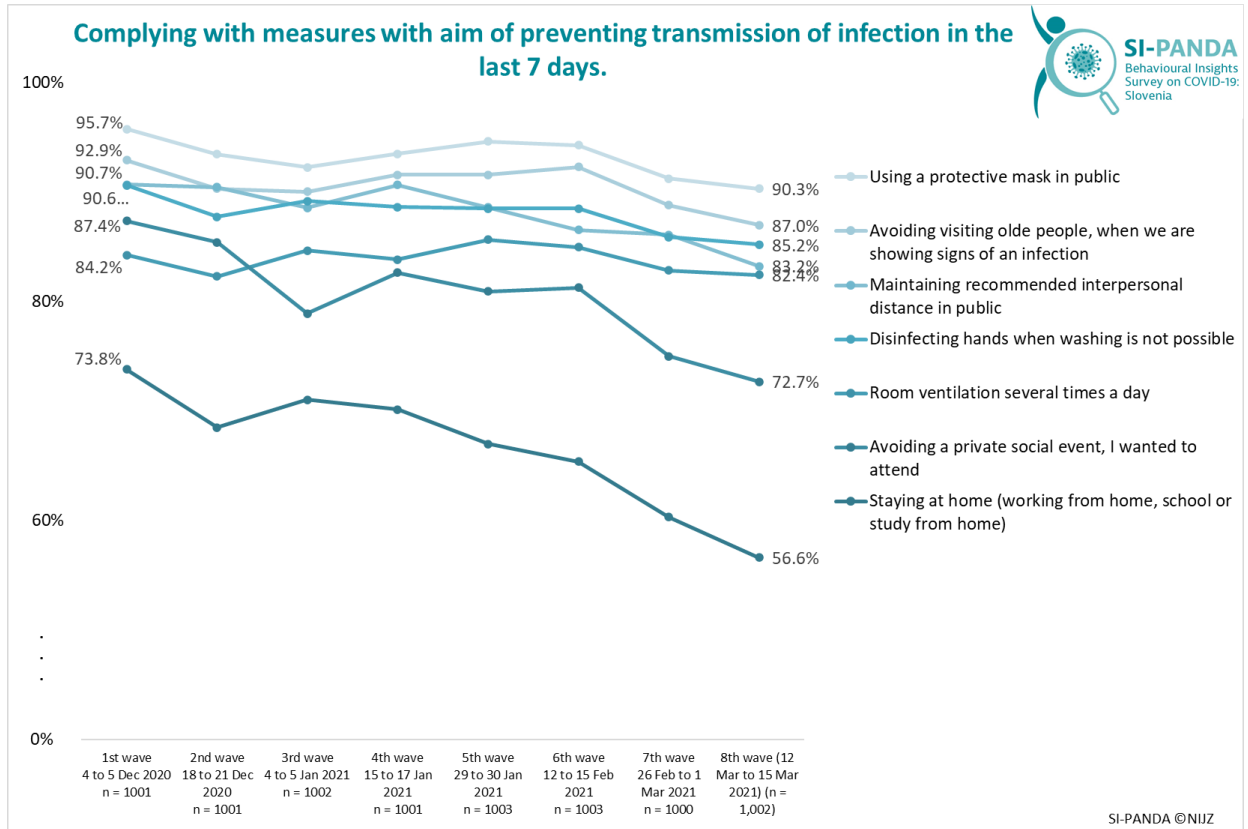


Figure 2: Complying with some measures with aim of preventing transmission of infection in the last 7 days, in total, by survey waves.



## 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 8<sup>th</sup> 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 (53.9%), and less support was given to restriction of outdoor movement between 9 pm and 6 am (24.0%). According to individual waves of survey and compared to 1<sup>st</sup> wave, there is a decline in support for both measures (Figure 3).

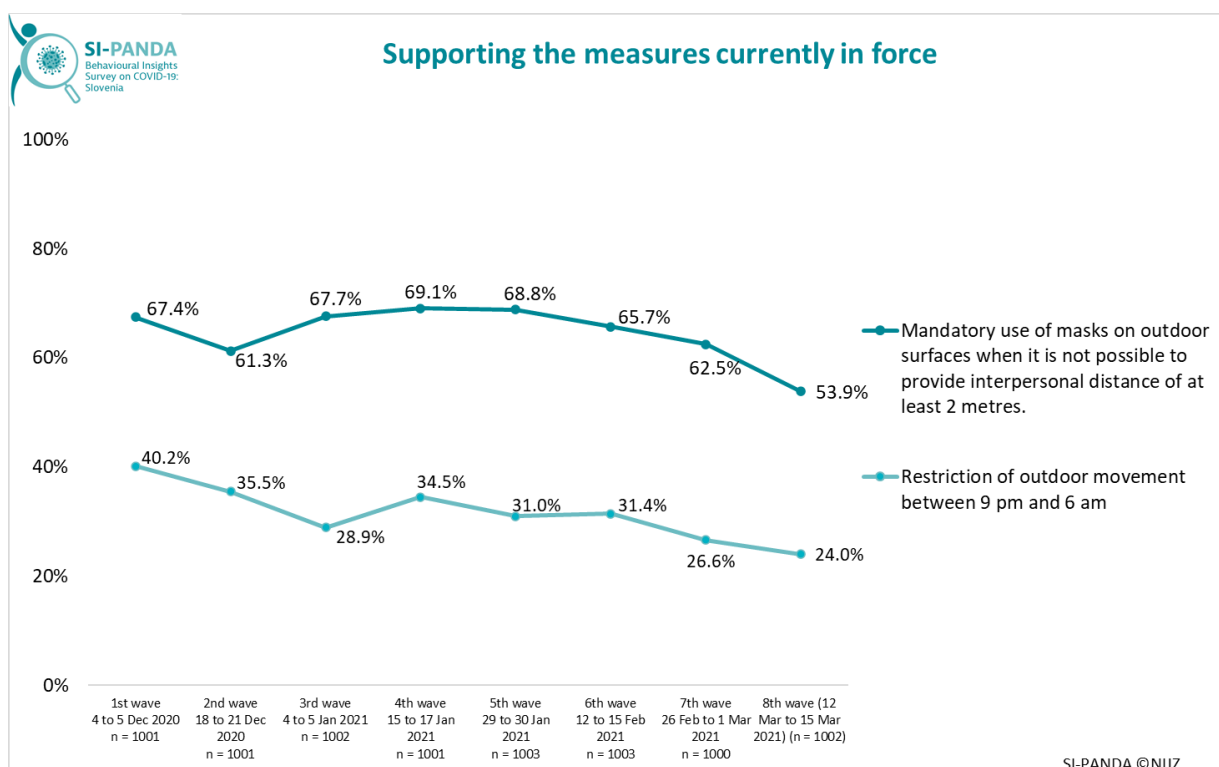


Figure 3: Supporting some of measures currently in force, in total, by survey waves.

In the 7<sup>th</sup> wave of the survey, we also asked respondents to what extent they support measures related to SARS-CoV-2. Respondents support the restriction of outdoor movement between 9 pm and 6 am the least – only just under a third of people (24.0%) support this measure. Half (50.4%) of respondents support the regular testing of teachers and educators, while 41.2% of respondents support regular testing of employees in shops and services. (Figure 4).

## Supporting the measures currently in force

8th wave (12 Mar to 15 Mar 2021; n=1002)

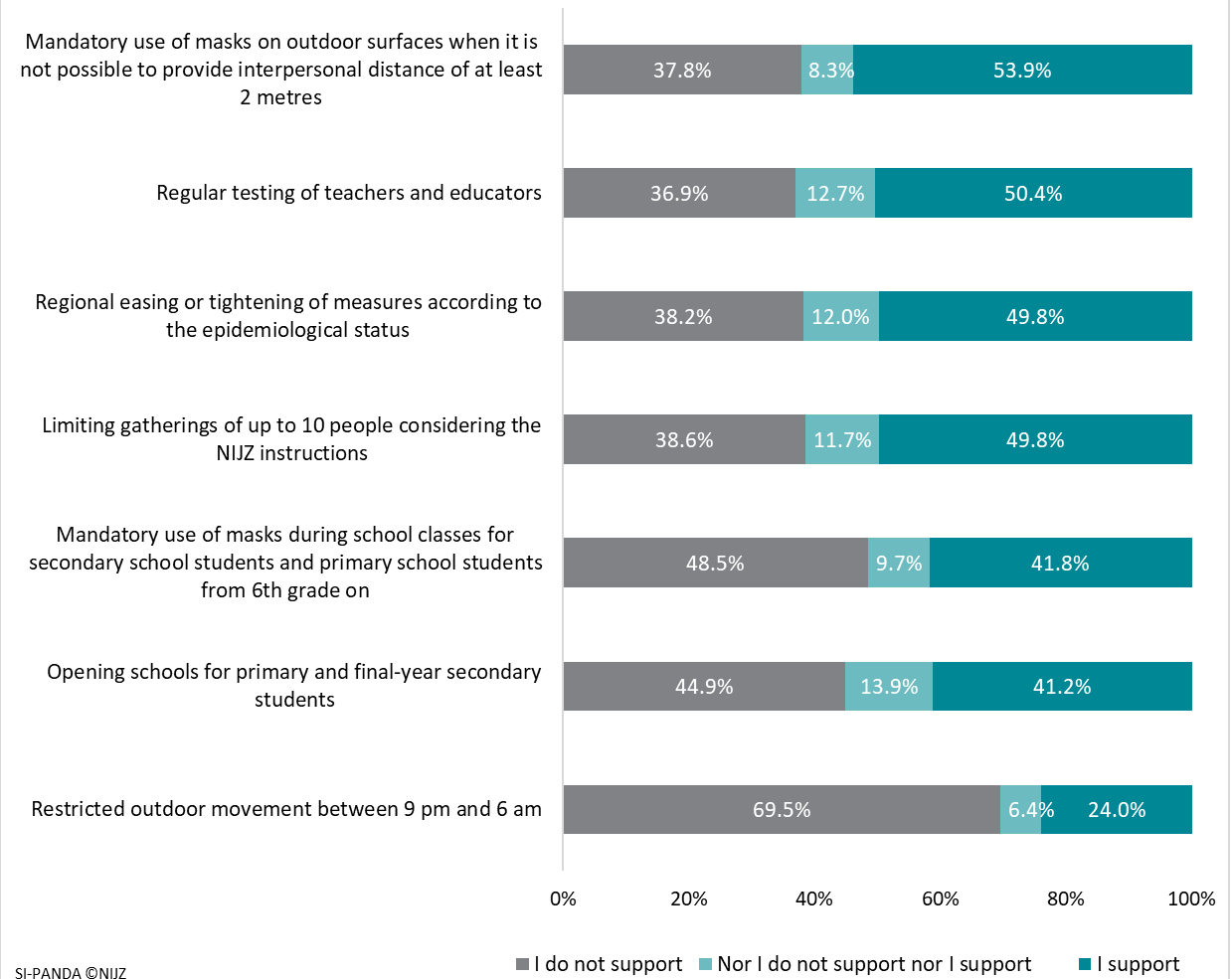


Figure 4: Supporting measures currently in force, in total.

## Supporting the release of measures and possible measures

The highest support for the released measures was achieved by the support for the opening of schools for all primary and secondary school students (85.1%), followed by the lifting of the ban on crossing municipal borders (79.8%) (Figure 5).

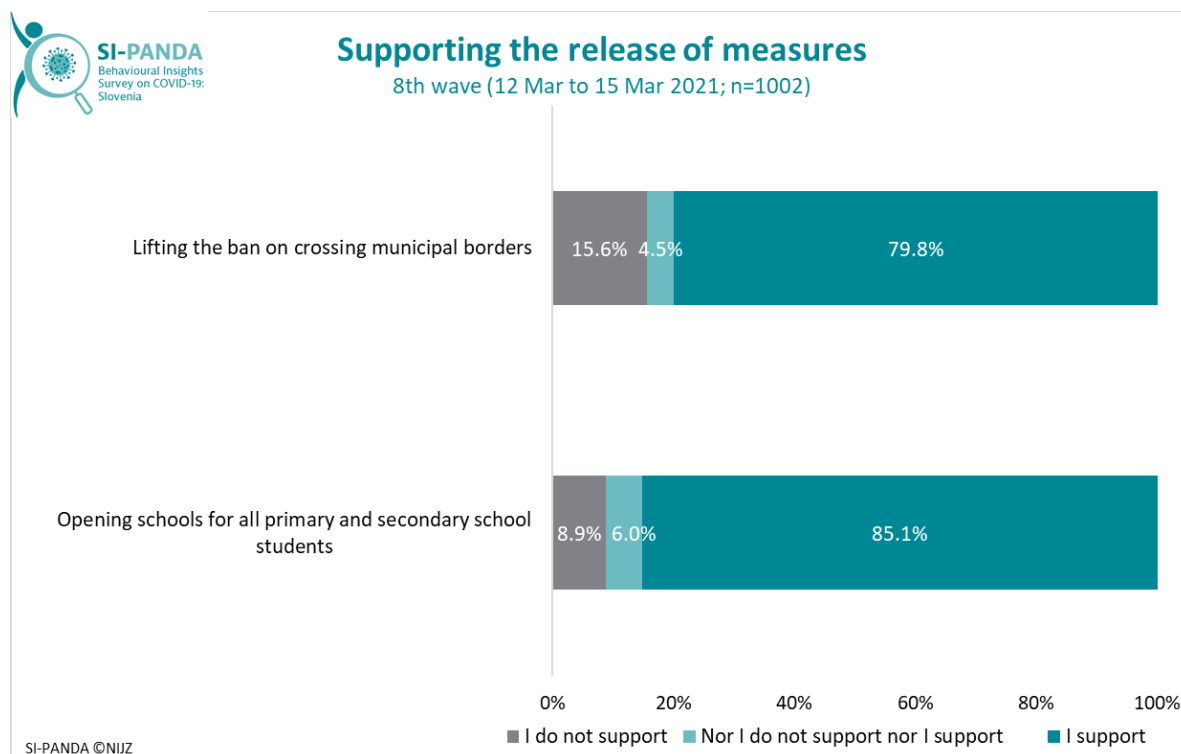


Figure 5: Supporting the release of measures, in total.

Among the possible measures, the respondents in 8<sup>th</sup> wave supported opening of faculties for all students the most (81.6%). Restriction of outdoor movement between 10 pm and 5 am would be supported by 35.8% of respondents (Figure 6).

## Supporting possible measures

8th wave (12 Mar to 15 Mar 2021; n=1002)

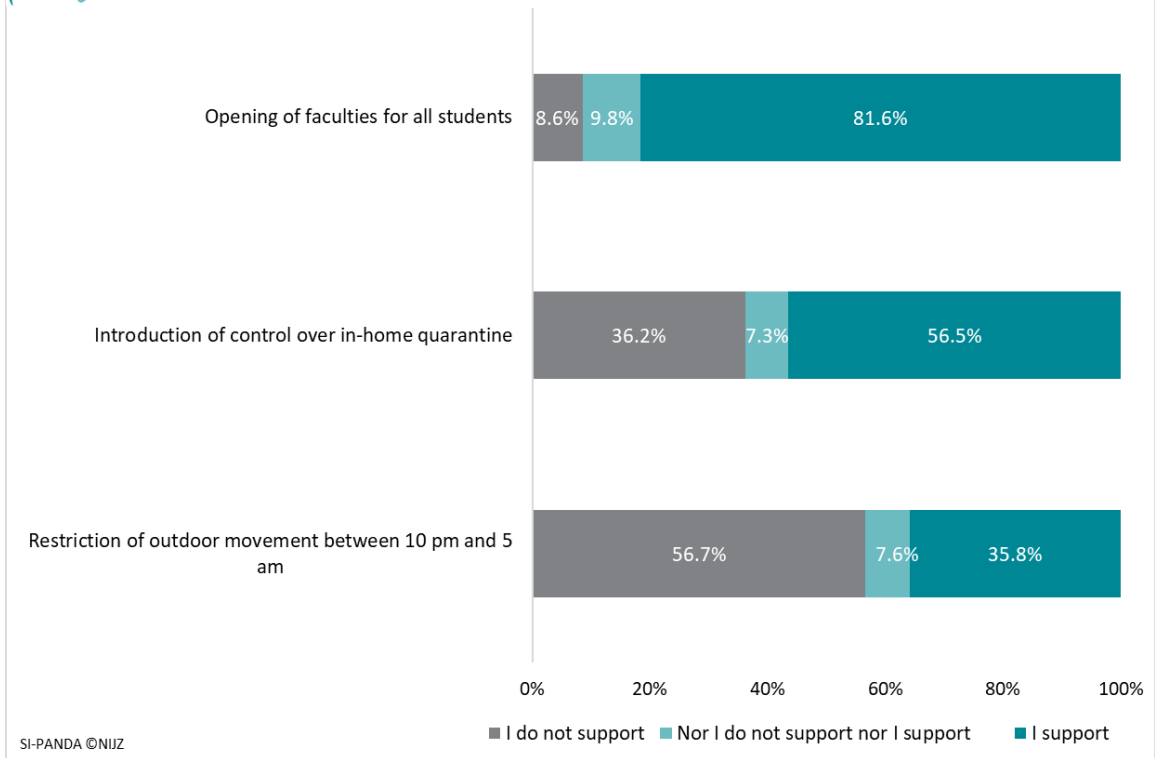


Figure 6: Supporting possible measures, in total.

## 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 7<sup>th</sup> 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 4.6 (Figure 7). If we compare the individual waves of survey, we find a decrease in trust in personal physician, hospitals, National Institute of Public Health, the Ministry of Health, public transport and in the Police.

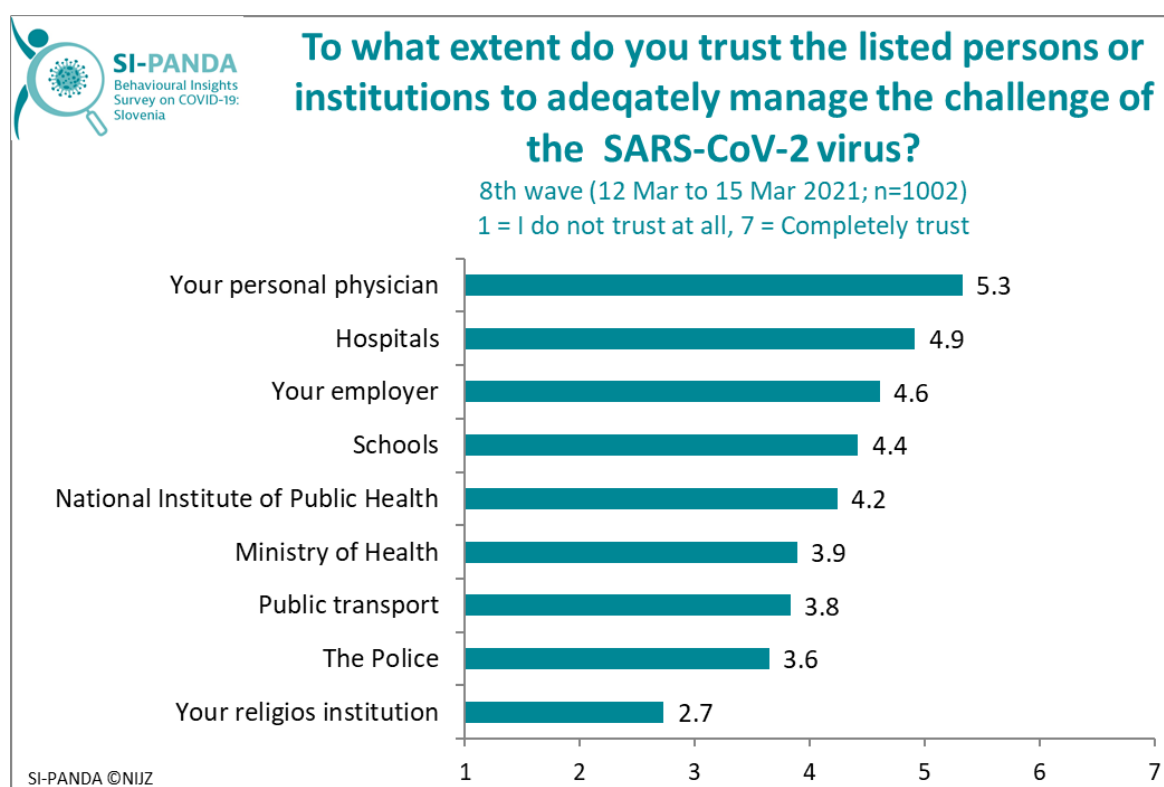


Figure 7: Trust in persons and institutions to manage pandemic adequately, in total.

## Vaccination

Just under two thirds (60.0%) 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 8).

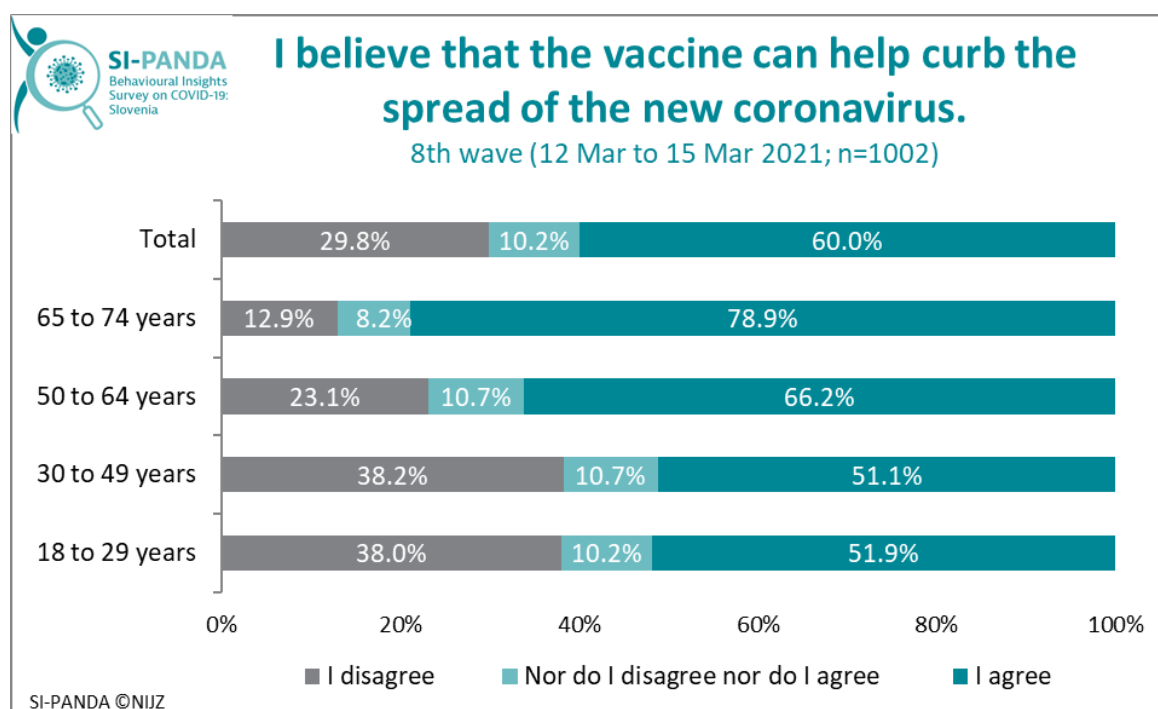


Figure 8: Opinion on whether the vaccine can help curb the spread of SARS-CoV-2, in total and by age groups.

If we compare the different waves of the survey, the proportion of people in 8<sup>th</sup> wave who believe that the vaccine against COVID-19 can help curb the spread of SARS-CoV-2 has decreased compared to previous waves and it amounts to 60.0% (Figure 9). The suspension of vaccination with AstraZeneca vaccine has most probably contributed to the decline in confidence in the vaccine.

### I believe that the vaccine can help curb the spread of the new coronavirus.

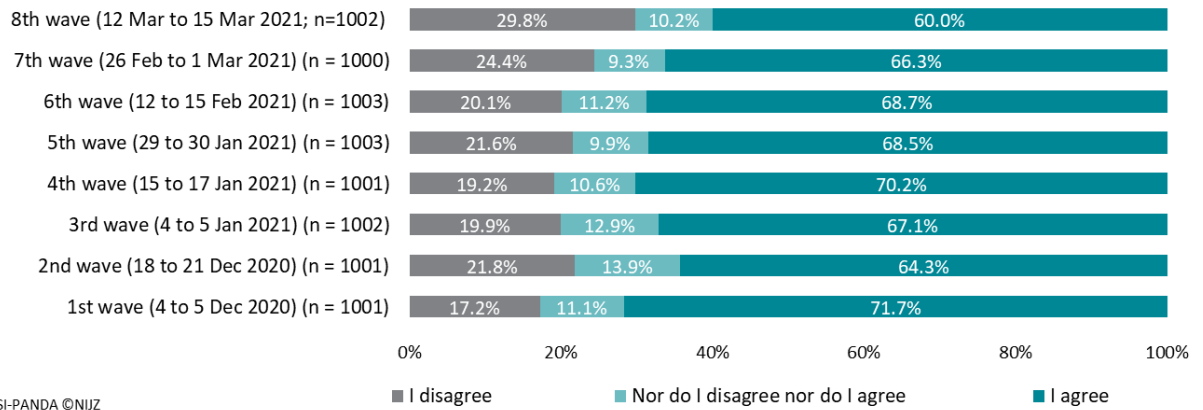


Figure 9: Opinion on whether the vaccine can help curb the spread of SARS-CoV-2, in total, by survey waves.

Just under a half (49.2%) of respondents intend to be vaccinated against SARS-CoV-2 when the vaccine is available. According to the individual waves of the survey, the intention to vaccinate decreased in the 2<sup>nd</sup> and 3<sup>rd</sup> waves compared to the 1<sup>st</sup> wave, rose in the 4<sup>th</sup> wave, and somewhat decreased again in the 7<sup>th</sup> and 8<sup>th</sup> wave (Figure 10).

Public opinion regarding the intention to vaccinate against COVID-19 is mostly around half of the respondents, so we cannot talk about more permanent trends of decreasing or increasing intention to vaccinate.

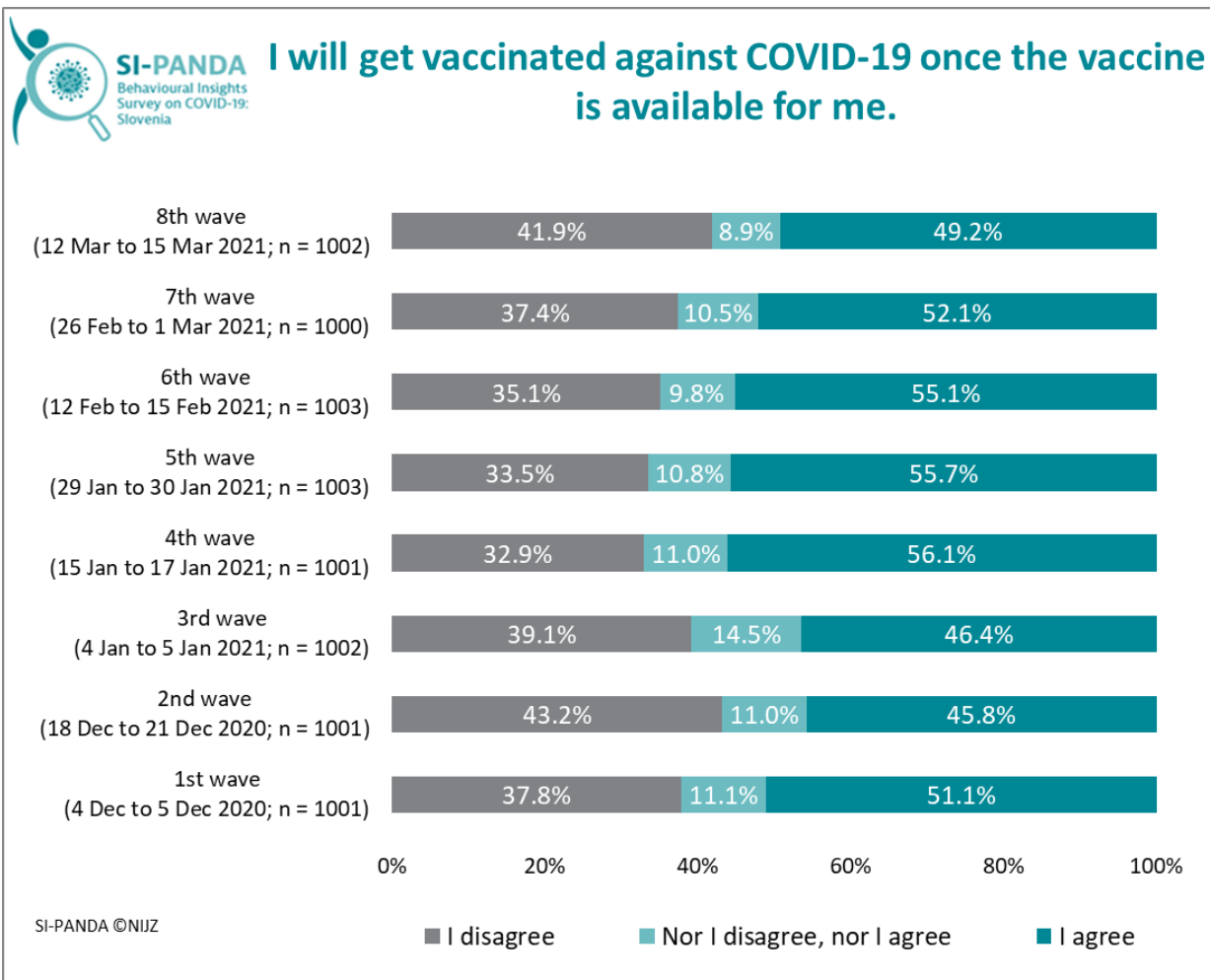


Figure 10: Intention to get vaccinated against COVID-19, in total, by survey waves.

The intention to get vaccinated increases with age (Figure 11). As expected, it is the highest in the age group 65 to 74, where more than three quarters of respondents (78.0%) are determined to be vaccinated. More men (55.0%) than women (43.0%) intend to get vaccinated. Among people with chronic diseases, 59.9% intend to get vaccinated.



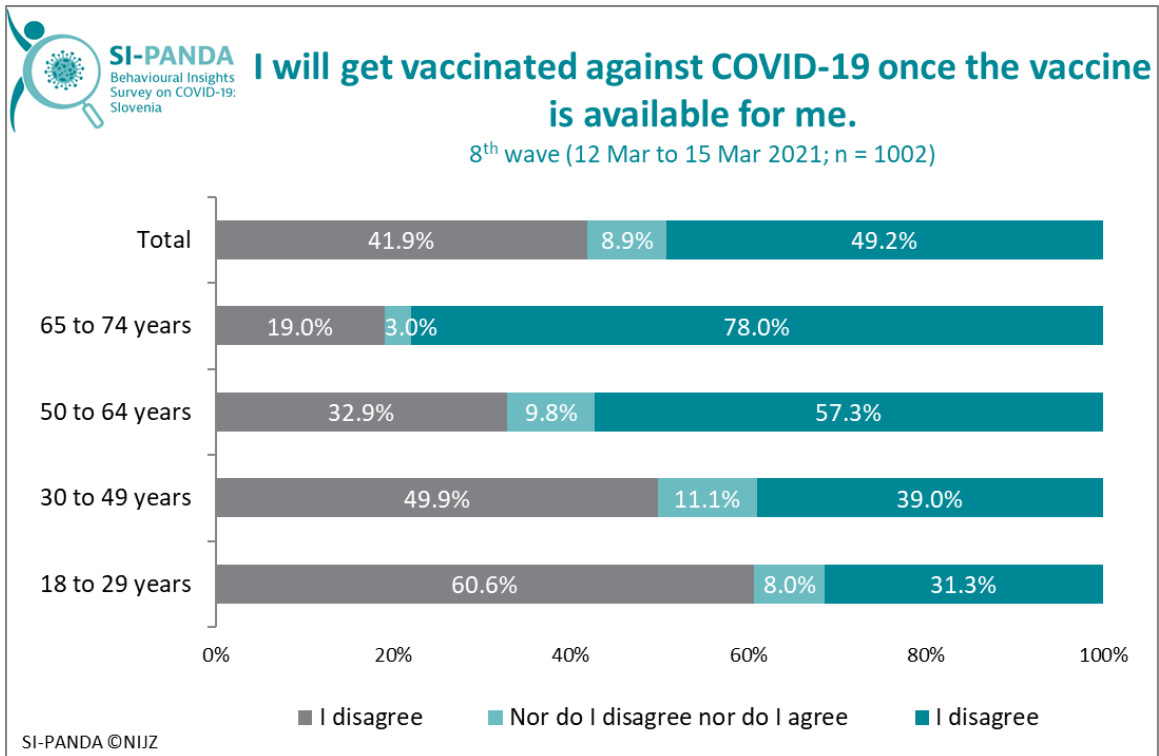


Figure 11: Intention to get vaccinated against COVID-19, in total and by age groups.

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 8<sup>th</sup> wave, the average value on the 7-point scale is 5.6);
- Whether sufficient data will be available that the vaccine is effective (5.4);
- Whether the vaccine has been in use for a long time (4.9);
- Recommendations from personal physician (4.4) (Figure 12).



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

### My decision on vaccination will depend on:

8<sup>th</sup> wave (12 Mar to 15 Mar 2021; n = 1002)  
1 = I do not trust at all      7 = I completely trust

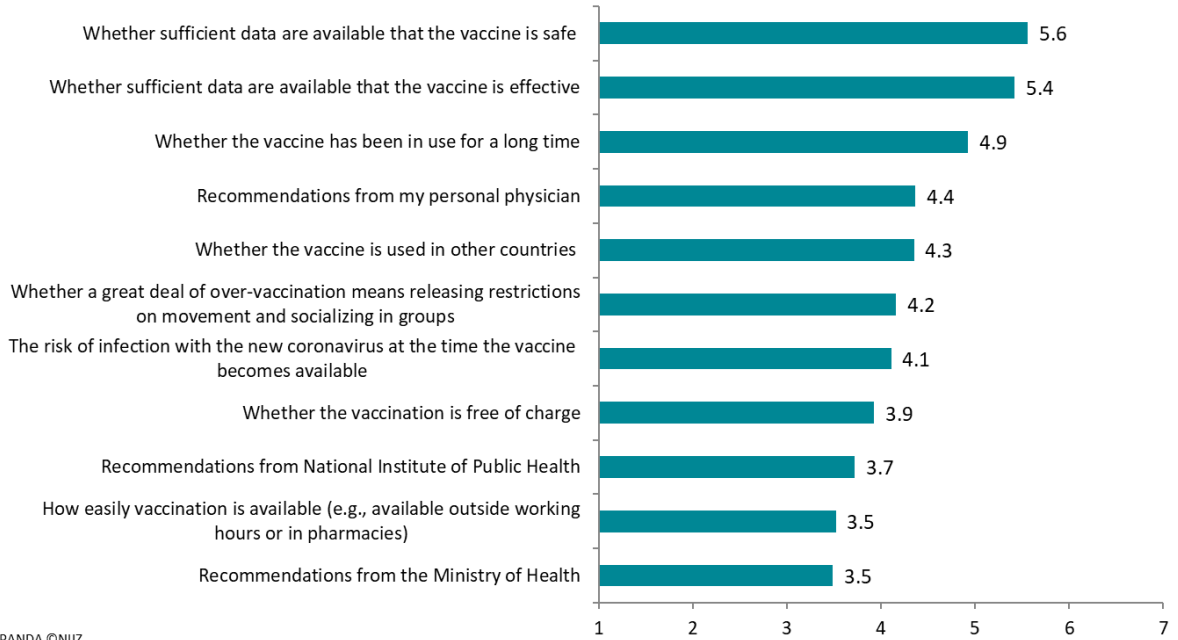


Figure 12: Reasons for decision on vaccination, in total.

## Results of a focus group with a group of people not in favour of vaccination against COVID-19 and those who are undetermined: 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 groups with the population of Slovenia who are not in favour of vaccination and those who are undetermined, we checked, among other things, how the epidemic affected their daily lives, lifestyles and general well-being.

The participants explained that their feelings and well-being were more positive during the first wave of the epidemic than during the second wave. In the first wave, the days were sunnier, there were more opportunities for active leisure, and summer was approaching, which filled them with hope that this would bring changes. The second wave was more difficult to get by due to reasons such as shorter and gloomier days, which meant less opportunities for activities in nature, social life was limited to a narrow circle of family members, the duration of “closure” or various restrictions was longer, life was limited to working for employer and home. They mentioned various feelings such as loneliness, feelings of restlessness, lack of genuine personal relationships, lack of greater company and conversation, tiredness of each other, irritability, disturbed by things they would otherwise not have been, and there was a feeling of uncertainty when the epidemic will end.

Participants cited similar experiences regarding nutrition. Most reported that they ate more or more “properly” during the epidemic, especially that meals became more regular as they had more time to prepare food, and some also began to eat healthier during the epidemic. The food budget increased during the pandemic for those participants who have families with young or growing children, as they had to provide all meals at home. Their shopping habits also changed slightly as they visited grocery stores less often, mostly once a week when they made larger purchases.

Most participants reported that they were less physically active during the pandemic, as there were fewer opportunities to exercise, fitness centres closed, so for example no organized exercise was available during this period, and so on. Physical activity did not decline in only a few participants; they regularly performed various exercises at home or were physically active in nature.

The epidemic also had a different impact on the financial situation of the participants. Those who kept their jobs during the epidemic reported that they even saved some money, as there was no opportunity to attend various events, theatres, trips, and so on. However, participants engaged in or employed in activities that were fully or partially limited at the time of the epidemic experienced negative changes in the financial situation that are still evident.

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

In the 8<sup>th</sup> wave of the survey, a good third of respondents (34.5%) stated that they had been less physically active in the last 2 weeks than before the pandemic; just under a fifth (18.2%) ate more unhealthy than before the pandemic; 16.6% of the respondents smoked more than before the pandemic; and 9.1% drank more alcohol than before the pandemic (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 7<sup>th</sup> and 8<sup>th</sup> 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 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.

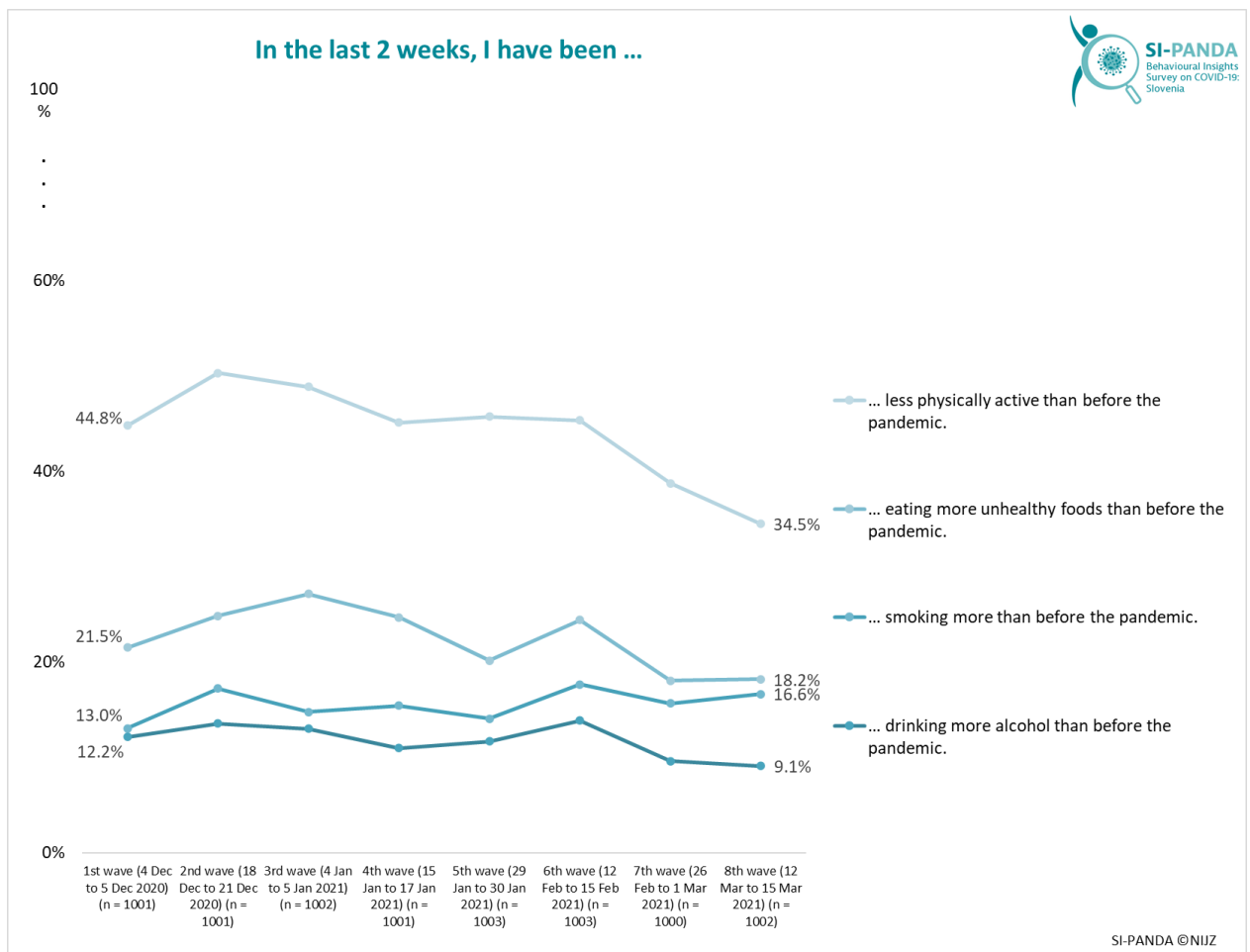


Figure 13: The impact of the pandemic on lifestyle in the last 2 weeks, in total, by survey waves.

The youngest age group of the respondents reported the unhealthiest lifestyle habits (Figure 14). Compared to other age groups, they ate more unhealthy foods than before the pandemic (31.8% of the respondents aged 18 to 29). Fifth (19.9%) reported that they smoke more than before the

pandemic, while a tenth (9.9%) of those respondents increased alcohol consumption during the pandemic.

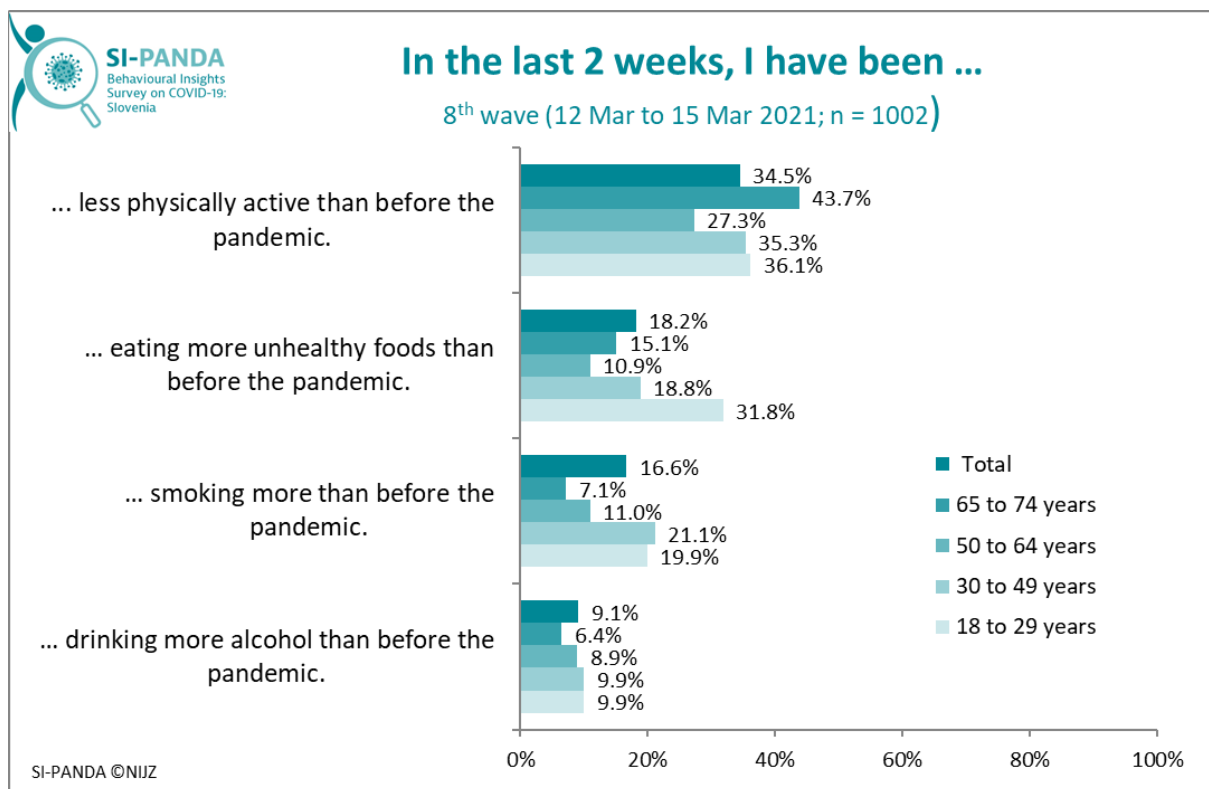


Figure 14: The impact of the pandemic on lifestyle in the last 2 weeks, in total and by age groups.

## Contact with the healthcare system

In the 8<sup>th</sup> wave of the survey, a good third of respondents (27.7%) avoided visiting a doctor due to the problem not related to SARS-CoV-2, and 7.2% postponed vaccination for themselves or their child. In the 8<sup>th</sup> wave, doctor avoidance decreased significantly and is the lowest so far compared to other waves of the research (Figure 15). This could be attributed to the reduced number of hospitalizations of COVID-19 patients, which has led to the release of some other healthcare activities for which more healthcare staff are also available and thus people have more options for treatment.

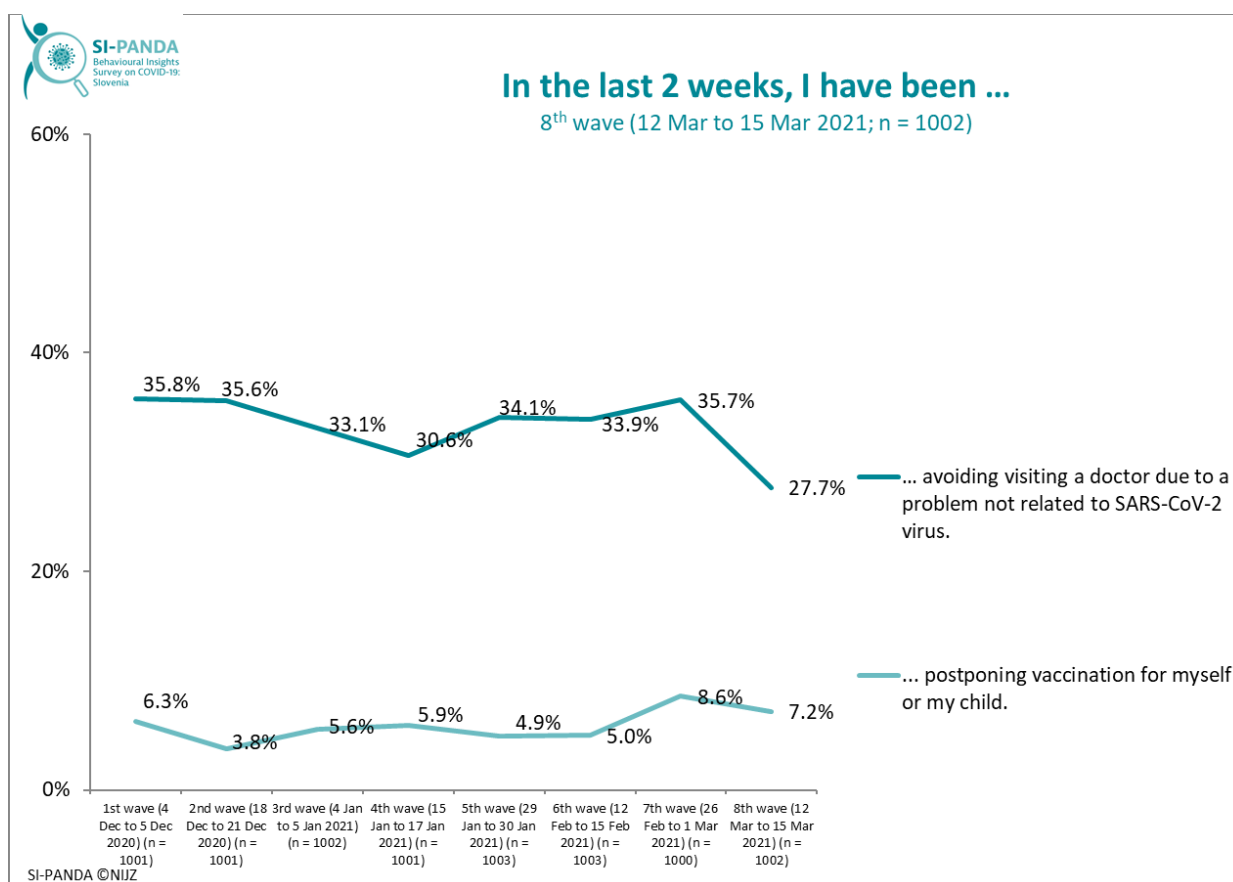


Figure 15: The impact of the pandemic on the contact with healthcare system in the last 2 weeks, in total, by survey waves.

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 SARS-CoV-2 virus (33.1%) and to a greater extent decide to postpone vaccination for themselves or their child (14.7%) (Figure 16).

## In the last 2 weeks, I have been ...

8<sup>th</sup> wave (12 Mar to 15 Mar 2021; n = 1002)

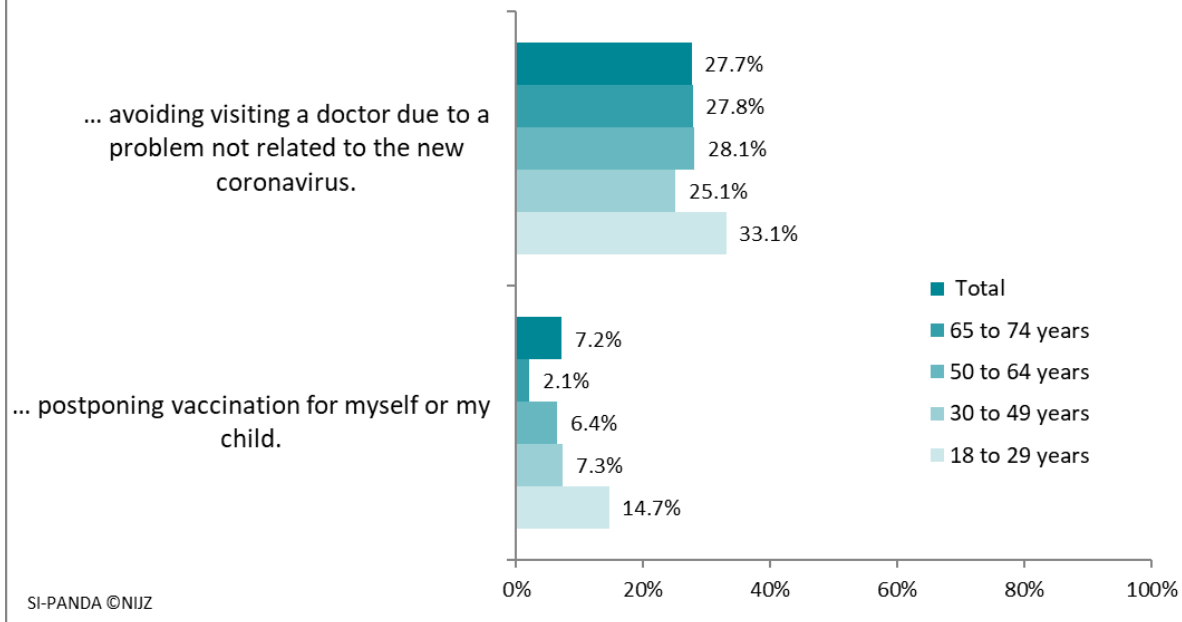


Figure 16: The impact of the pandemic on the contact with healthcare system in the last 2 weeks, in total and by age groups.

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

## The impact of the pandemic on the financial situation

Almost a third (29.5%) of the respondents believe that their financial situation in the last 3 months is worse than before. The share of respondents who believe that their financial situation is worse in the last 3 months than before has decreased by 3.8 percentage points compared to the 1<sup>st</sup> wave of the survey. Respondents, aged 18 to 29, perceive their financial situation the worst (Figure 17), 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.

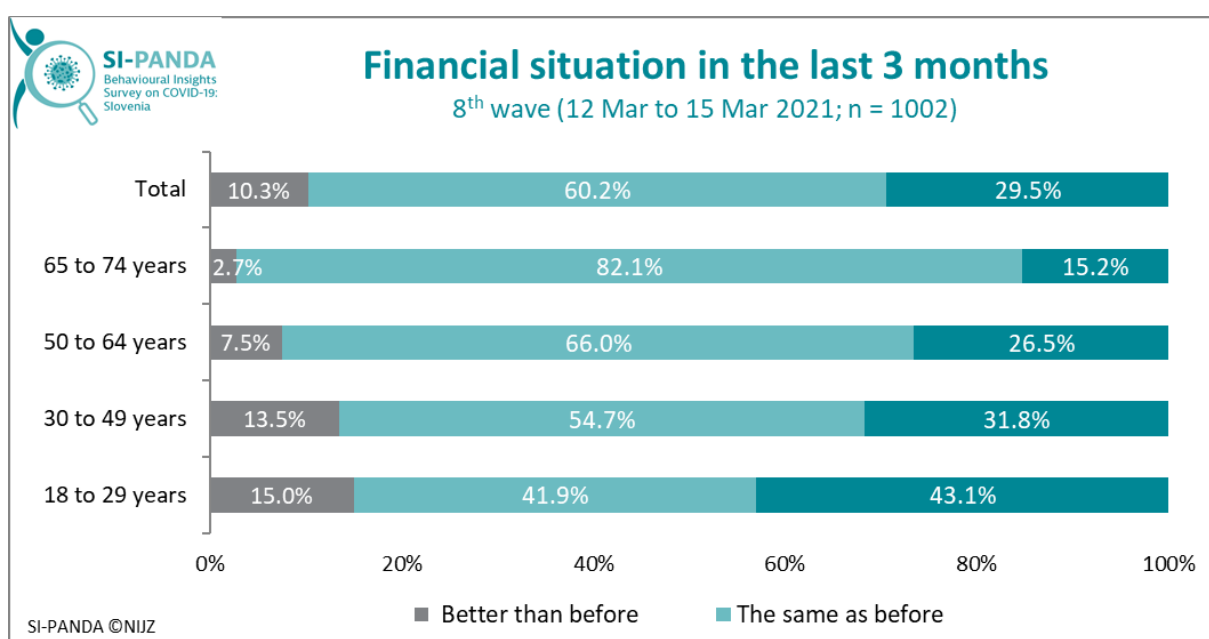


Figure 17: Perception of financial situation in the last 3 months, in total and by age groups.

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 18).



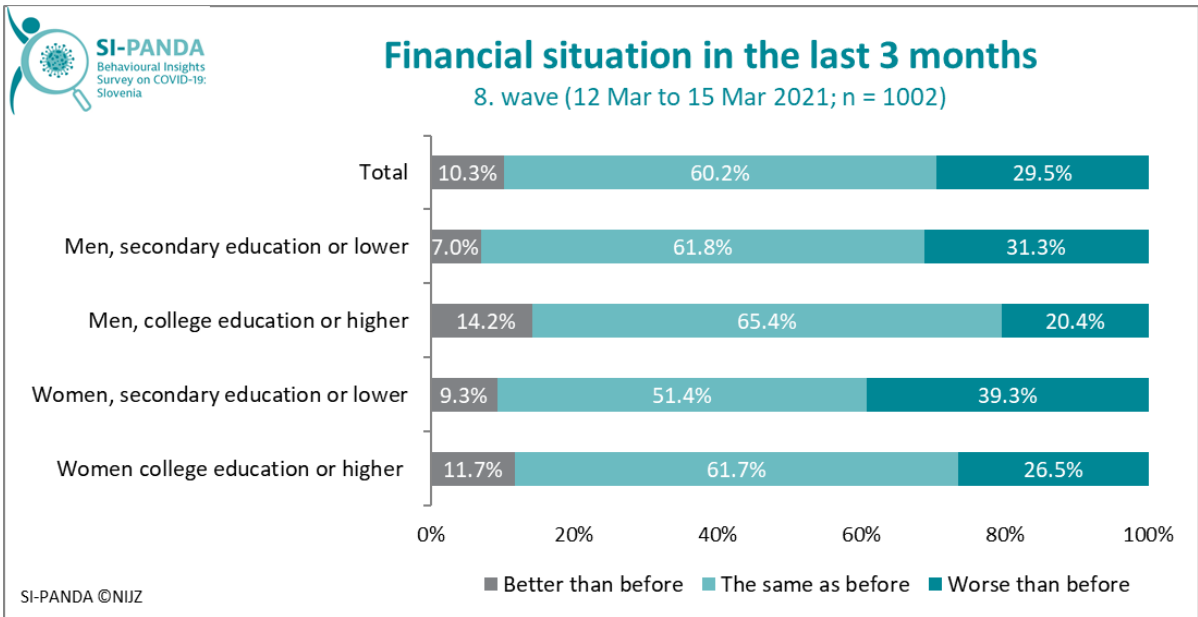


Figure 18: Perception of financial situation in the last 3 months, in total and by gender and level of education.

## Highlighted topic of the 8<sup>th</sup> survey wave: Mental health during the COVID-19 pandemic

The COVID-19 pandemic, which has turned into a sydemic in most parts of the world, has consequences in all areas of our lives, including mental health. The World Health Organization (WHO) definition states that “*health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*”<sup>3</sup>. Mental health is an indispensable part of holistic health – one could say that there is only one health – and it means much more than the absence of mental problems or disorders. The WHO defines mental health as a state in which an individual recognizes his or her abilities and potentials, successfully copes with everyday challenges, works effectively, and contributes to the community. Mental health problems are associated with a high burden of disease, as studies estimate that the burden of illness due to mental health problems in the EU Member States in 2015 was 4% of GDP<sup>4</sup>. Of this, the largest share of costs (around € 240 billion) was represented by indirect economic costs incurred outside the health sector and related to the labour market, absenteeism, presentism and consequent reduced productivity. We can therefore rightly say that mental health or non-health is a great burden not only for the individual and his loved ones but for society as a whole. High economic costs, consequences on a social and individual level due to mental health problems are not inevitable. We can address them, reduce them and try to avoid them with various preventive activities, strengthening sources of help and treatment, and above all, with measures to promote or strengthen and improve mental health. The first step towards developing effective measures is to collect data and monitor the mental health of the population. This is especially important during the COVID-19 pandemic, which has interfered with our experience and strongly affects our behaviour. It shook our feelings of security, certainty and predictability and intensified our fears, insecurities, anxiety and pressures. In addition to individual challenges, our mental well-being is also adversely affected by unfavourable changes in society with the financial, social and economic consequences of pandemic.

The effects of the COVID-19 pandemic on mental health are manifested through direct and indirect impacts. As a direct impact of a pandemic, we understand the phenomena that result from the presence of the virus – fear of infection and the spread of infection, fear of a more severe course of the disease, stigmatization of the infected, etc. As an indirect consequence of the pandemic on mental health, however, we can understand the impact of various measures taken to limit the spread of infection, due to which we, as individuals and as a society, need to change the way we are accustomed to. This includes reduced social contacts, a changed way of socializing with people who are important to us, a changed way of working, blurred boundaries between work and leisure and obligations (including family), limited movement, difficult access to certain services (e.g., health care), etc. Most likely, with a time delay, the impact of the pandemic will be reflected on the mental health of individuals and, indirectly, society. Difficult access to, for example, health services will make it harder to identify newly developed mental health problems or they will be identified with delay, while existing ones may deepen. Due to the impact that COVID-19 has on the economy, the socioeconomic status of individuals and families may

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<sup>3</sup> World Health Organization (2018). Mental health: strengthening our response. Mental Health: Strengthening Our Response. <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>.

<sup>4</sup> OECD/European Union (2018). Health at a Glance: Europe 2018: State of Health in the EU Cycle, OECD Publishing, Paris/European Union, Brussels, [https://doi.org/10.1787/health\\_glance\\_eur-2018-en](https://doi.org/10.1787/health_glance_eur-2018-en).

deteriorate significantly, which may also affect the development of mental distress. Limited social contacts can also have a negative impact on the development of mental distress and illness. As a society, we need to prepare and act in a timely manner on the challenges that are present and still await us in the field of mental health.

## Mental well-being and mental health problems in the past months of the pandemic

Mental well-being was measured in the study by The World Health Organization - Five Well-Being Index<sup>5</sup> (WHO-5), which is a short self-reported scale<sup>6</sup> of current mental well-being and is also used for screening for depressive disorder<sup>7</sup>. The WHO-5 scale was used in all eight waves of the study, namely we calculated averages for mental well-being and based on the values of the WHO-5 scale divided the study participants into 3 groups according to the predicted risk of mental health problems: into a group with increased risk of depression disorders; a group at increased risk for mental health problems; and a group of those without mental health problems.



Figure 19: Level of mental well-being, by gender, by survey waves.

In the last, 8<sup>th</sup> wave, of the survey the overall average mental well-being was 60.5 (out of 100), with women rated their mental well-being worse compared to men. Younger adults (aged 18 to 29) rated their mental well-being the worst compared to other age groups.

<sup>5</sup> World Health Organization (2020). Survey tool and guidance: rapid, simple, flexible behavioural insights on COVID-19: 29 July 2020.

<sup>6</sup> The scale measures well-being with five statements: In the last 2 weeks... I have felt cheerful and in good spirits; I felt calm and relaxed; I felt lively and full of energy; I woke up fresh and rested; My everyday life was filled with things that interested me. Possible answers: All the time; Most of the time; More than half the time; Less than half the time; Some time; Never).

<sup>7</sup> Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 Well-Being Index: a systematic review of the literature. *Psychotherapy and psychosomatics*, 84(3), 167-176.

From the 1<sup>st</sup> to the 8<sup>th</sup> wave, mental well-being improved slightly in both men and women (Figure 19). Maintaining a level of mental well-being or even slightly improving well-being over time can be attributed to the ability of the adult population to adapt to new circumstances and cope more easily with the stressful events we witness during a pandemic. Foreign research suggests that mental health is at a lower level during the pandemic than it was before the pandemic. The SI-PANDA survey began when the pandemic was already present in Slovenia, so comparisons with the previous situation cannot be shown. Research from abroad largely shows an increase in mental health problems (anxiety, depression, stress disorders) compared to the time before the pandemic, while the findings on changes in mental well-being are less uniform - in some environments, changes before and during the pandemic were not detected<sup>8</sup>. At the same time, it should be pointed out that the picture of the mental health of the population can be very different if we focus our attention on different subgroups of the population. The experience of a pandemic and the consequent impact on an individual's mental health depends on several factors that are differently distributed among the population. Some differences in the experience of a pandemic are already indicated in the analysis of the risk of developing a depressive disorder by age groups. The past waves of the SI-PANDA survey indicate a declining trend in the risk of developing depressive disorder among people aged between 30 and 64 (Figure 20). A similar trend cannot be recognized in the population aged 18 to 29 years and 65 to 74 years.

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<sup>8</sup> Aknin, L. B., De Neve, J. E., Dunn, E. W., Fancourt, D., Goldberg, E., Helliwell, J., ... Amor, Y. B. (2021, February 19). A Review and Response to the Early Mental Health and Neurological Consequences of the COVID-19 Pandemic. <https://doi.org/10.31234/osf.io/zw93g>

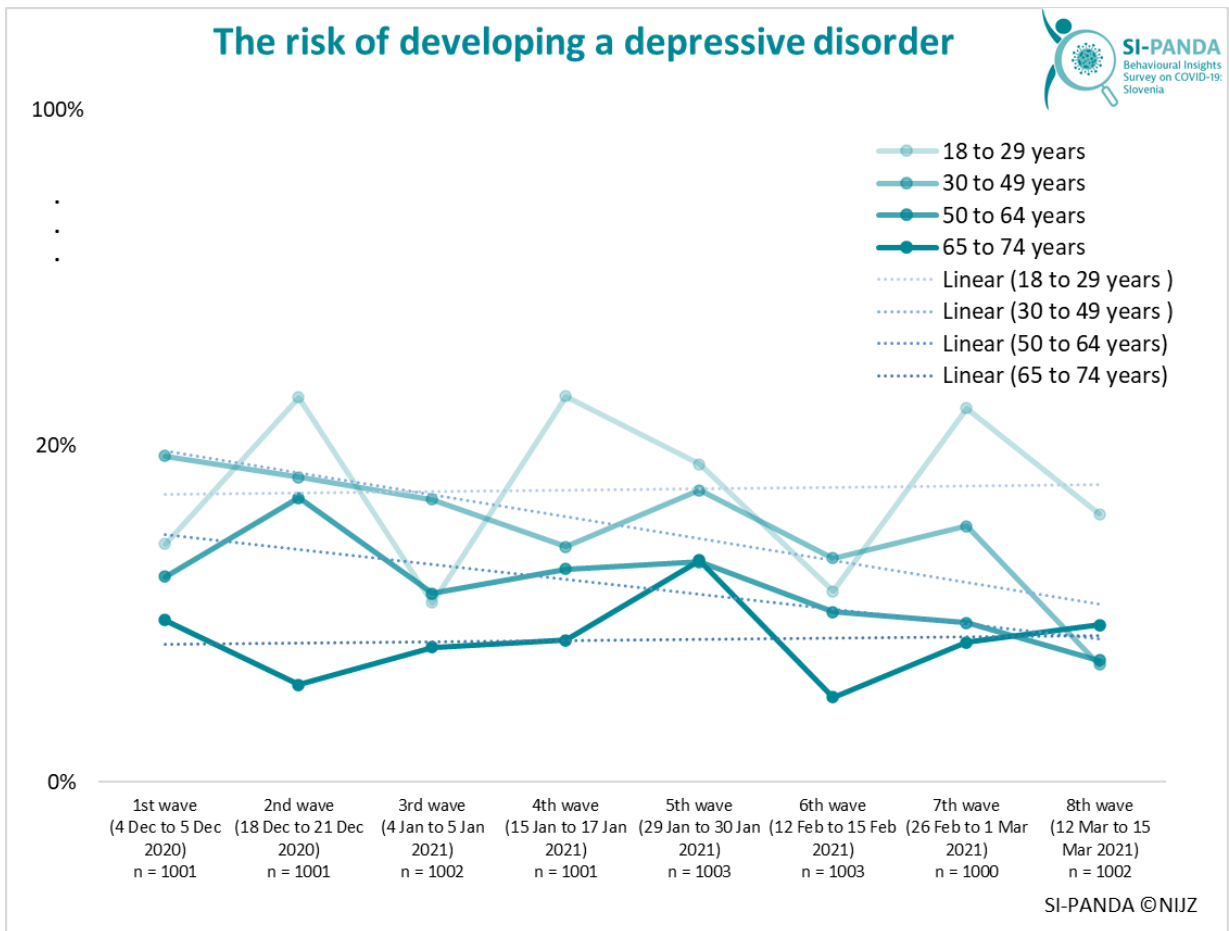


Figure 20: The share of population at risk of developing a depressive disorder, by age groups, by survey waves.

In order to explain the described differences, additional research should be conducted. However, based on foreign research, we can conclude that the identified differences are not necessarily related to age, but to the presence or absence of various factors that have a significant impact on mental health and typically occur at different ages (e.g., financial security, loneliness, chronic illness, etc.).

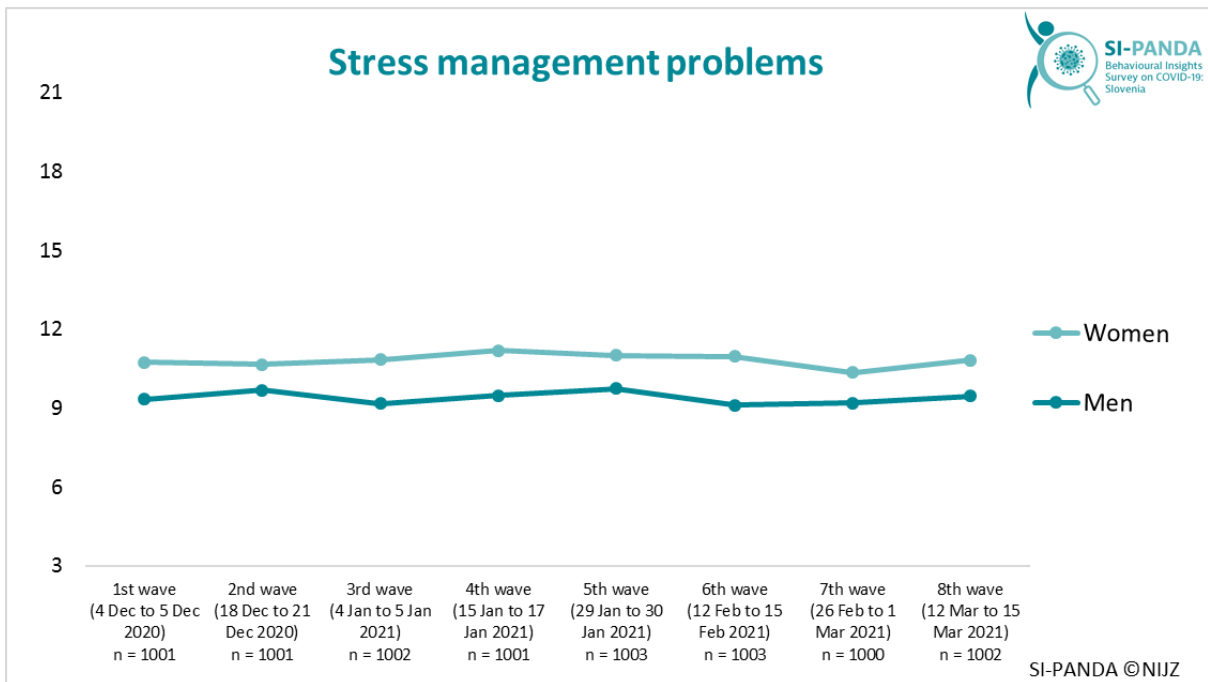


Figure 21: The level of stress management problems in previous survey waves, by gender and survey waves.

During the pandemic, we are exposed to a number of stressful events that can affect our mental health. Stress is a completely normal response to stressful circumstances, but people manage it differently. The effects on mental health occur mainly when stress is present for too long and too intensely to be successfully managed. In the SI-PANDA survey, we monitored stress management problems in the adult population using a stress management questionnaire<sup>9,10</sup>. The results of the first eight waves of the study show that stress management problems are more prevalent in women, but in both genders, they do not change significantly between the 1<sup>st</sup> and 8<sup>th</sup> waves of the study (Figure 21). This suggests that the majority of the population is successfully adapting to the new stressors that emerged during the pandemic. The latter is also confirmed by the data on mental well-being presented in this report.

<sup>9</sup> World Health Organization (2020). Survey tool and guidance: rapid, simple, flexible behavioural insights on COVID-19: 29 July 2020.

<sup>10</sup> The questionnaire contains three statements on the topic of stress management (I have a hard time breaking through stressful events; I don't need much time to recover from a stressful event; When something bad happens, I have a hard time recovering).

## Mental well-being and SARS-CoV-2 virus infection

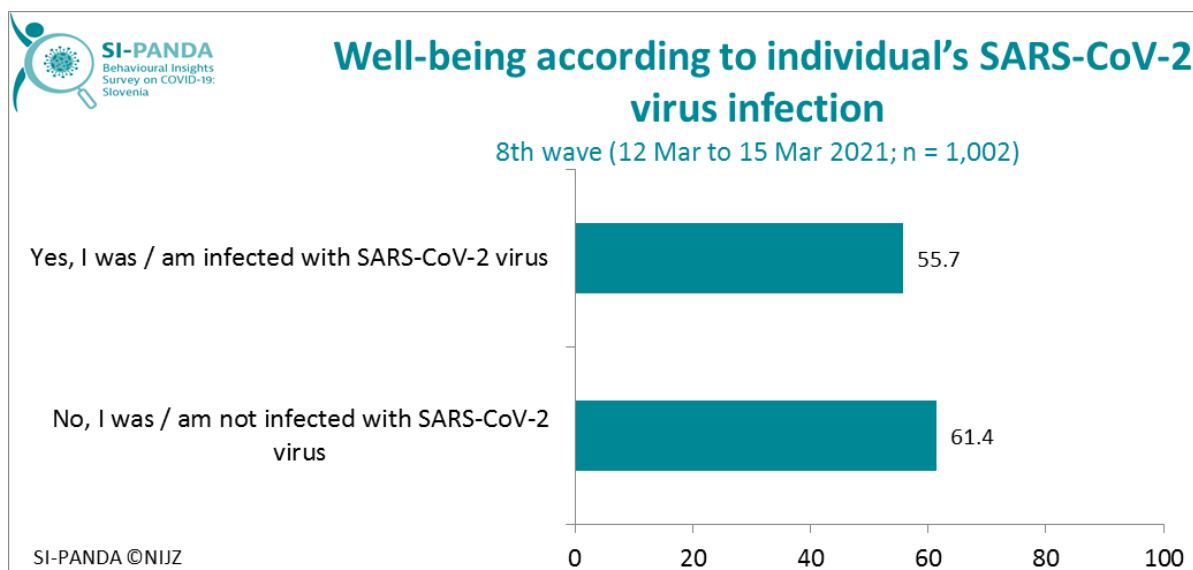


Figure 22: The level of mental well-being according to SARS-CoV-2 virus infection, in total.

Survey participants who were or are infected with SARS-CoV-2 virus have lower mental well-being than those who were not infected with the virus (Figure 22). Based on these data, no causal link can be drawn between SARS-CoV-2 virus infection and mental well-being. It is very likely that circumstances have a more significant influence (such as social isolation of the infected, stigmatization, fear of the spread of the infection and the consequences of the disease experienced to varying degrees by people with COVID-19) as the disease itself.

## Presence of mental problems and assessment of financial situation

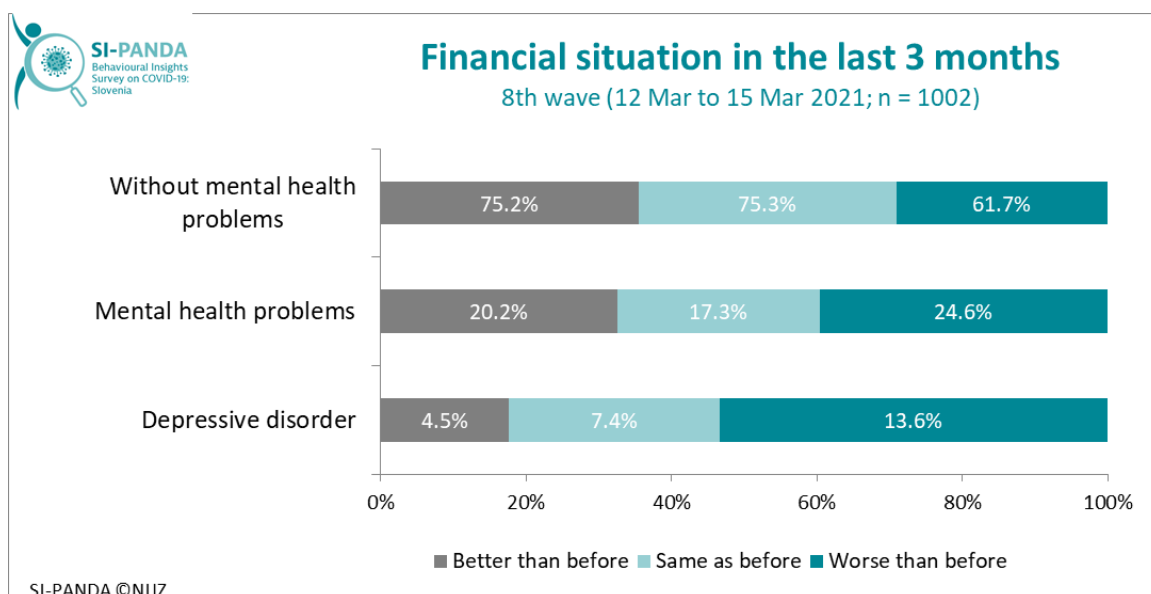


Figure 23: Mental health problems according to financial situation in the last 3 months, in total.

The results of the 8<sup>th</sup> wave of the survey show that approximately 9% of the adult population shows an increased risk of depressive disorder, 20% have an increased risk of mental health problems, and the majority (71%) have no mental health problems. Those whose financial situation has deteriorated in the last 3 months have a higher risk of depression and mental health problems (Figure 23). The worse financial situation is an important factor for poor mental health also in non-pandemic circumstances, and vice versa. Mental health inequalities, which we have observed for decades, remain present or even increase during a pandemic. Population groups, which are already vulnerable to the development of mental health problems, are also exposed to many aggravating circumstances that arose during the pandemic - such circumstances are, for example, higher unemployment, job insecurity, and weak financial security. Therefore, it is very important to pay special attention to corrective and preventive measures for individuals and groups whose financial situation has deteriorated, who have lost their job or are unable to perform it.

## Sense of coherence and mental health

A sense of coherence is a concept that describes an individual's ability to cope with stressful events and strengthen their own health. An individual can effectively exercise the latter if they can find in life the connection and meaning of life, so that they do not feel helplessly exposed to a destiny beyond their control. A sense of coherence includes (i) an understanding and predictability of what is happening in the environment, (ii) a sense of manageability of what is happening in the environment, and (iii) a sense of the meaning of what is happening in the environment. In the SI-PANDA survey, the sense of coherence was measured with an abbreviated version of the "Sense of Coherence – Orientation to Life Questionnaire"<sup>11</sup>. Due to the protective role of a sense of coherence in managing stressful experiences, it makes sense to examine the level of coherence among the population and its relationship to mental well-being or mental health problems during the COVID-19 pandemic. Figure 24 shows that the sense of coherence increases with age. The lowest sense of coherence was found in the lowest age group, and the highest sense of coherence in the highest age group. Except in the 30-49 age group, men expressed a higher sense of coherence compared to women. An increase in the sense of coherence with age and gender differences was also observed in foreign research<sup>12</sup> during non-pandemic conditions.

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<sup>11</sup> Zaletel-Kragelj, L., Pahor, M., Farkaš-Lainščak, J. idr. (2015). Prevod vprašalnika "Sense of Coherence - Orientation to Life Questionnaire" v slovenski jezik. Katedra za javno zdravje. Ljubljana: Medicinska fakulteta.

<sup>12</sup> Nilsson, K. W., Leppert, J., Simonsson, B., & Starrin, B. (2010). Sense of coherence and psychological well-being: improvement with age. *Journal of Epidemiology & Community Health*, 64(4), 347-352.



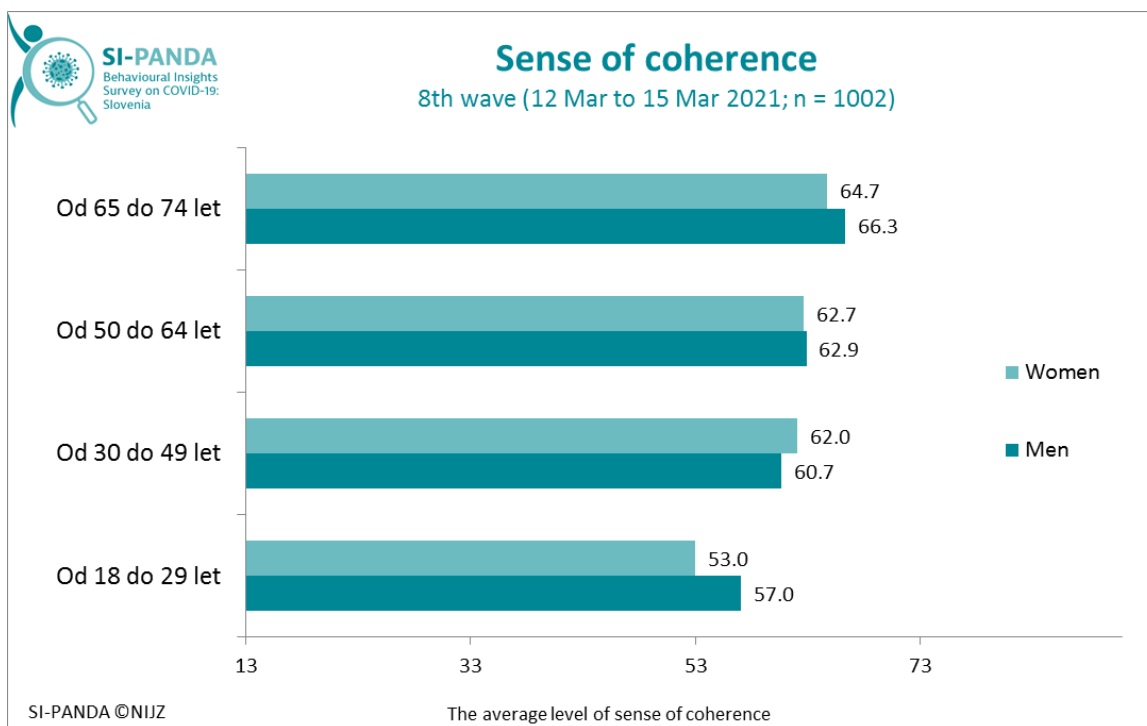


Figure 24: The level of sense of coherence, by age groups and by gender.

Researchers find that a higher sense of coherence is associated with better overall health, greater resilience to stress, and better mental health<sup>13</sup>. In the SI-PANDA survey, we similarly found that a sense of coherence was significantly associated with the level of mental well-being (a higher sense of coherence was associated with a higher level of mental well-being (Figure 25)).

<sup>13</sup> Mc Gee, S. L., Hölzge, J., Maercker, A., & Thoma, M. V. (2018). Sense of coherence and stress-related resilience: Investigating the mediating and moderating mechanisms in the development of resilience following stress or adversity. *Frontiers in Psychiatry*, 9, 378.

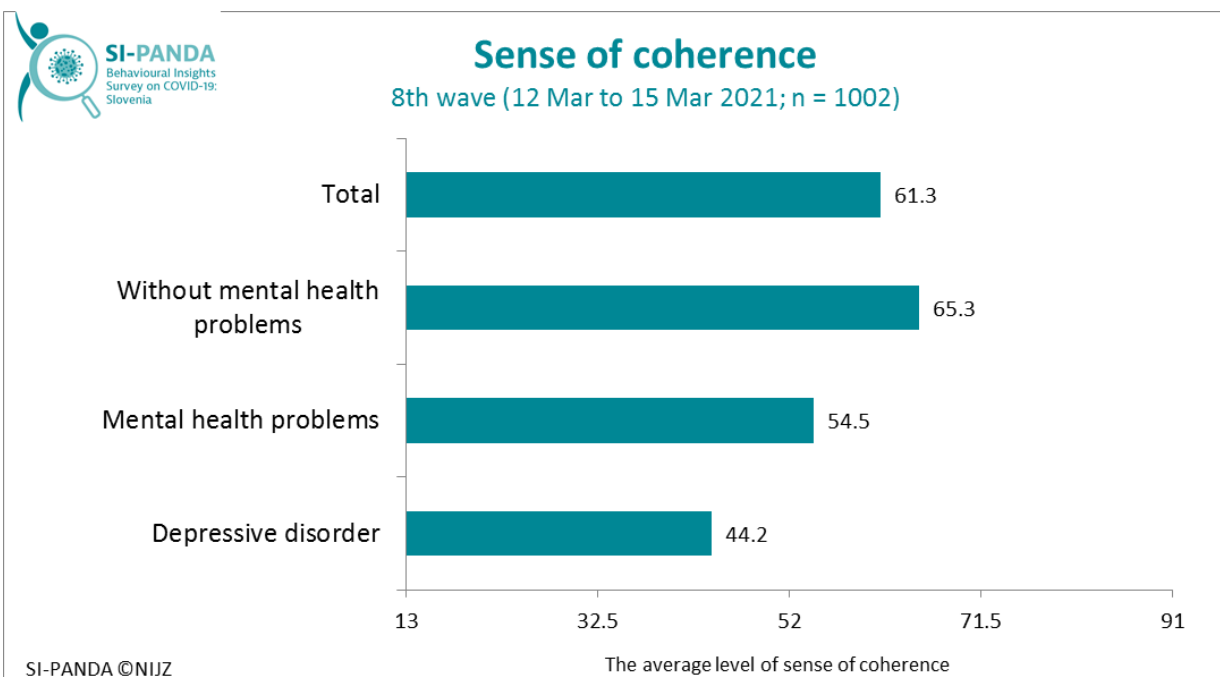


Figure 25: The level of sense of coherence according to presence or absence of mental health problems, total.

A sense of coherence is one third higher among people who have no mental health problems than among people who perceive an increased risk of depressive disorder. Due to the nature of the research, causal relationships cannot be inferred. Nevertheless, it should be pointed out that strengthening the sense of coherence even among people with a mental disorder is an effective way to improve the quality of life and mental health.

## Conclusion

In the SI-PANDA survey, we find that in the first eight waves of the survey, the mental well-being of the population is relatively stable, or that the average level of mental well-being is even slightly improving. This suggests that the majority of the population is adapting relatively successfully to the pandemic lifestyle. However, it should be pointed out that this cannot be said for all groups of the population. The differences in mental health observed before the pandemic are also present during the pandemic and increase with the duration of the pandemic. In order to more accurately assess the impact of the pandemic on the mental health of the population, further research is needed, which will also include the population groups that are most vulnerable to the development of mental health problems. However, existing research is a solid enough basis for targeted action to protect mental health. In order to reduce the consequences of the pandemic, working conditions and environments must be ensured, as well as safe access to basic goods and services, such as employment, schooling for children and adolescents, and access to professional help in case of mental health problems. Groups that are particularly vulnerable to mental disorders should be targeted, while the implementation of activities to prevent mental disorders and strengthen the mental health of the entire population should be adapted to the capacities and circumstances present during the pandemic. The COVID-19 pandemic is one of the major collective challenges we have experienced and will witness in our lives. Limiting the spread of infection and reducing the burden of COVID-19 is undoubtedly our common priority. But at the same time, we must not forget about mental health care during and after the pandemic.



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