

# LIVES Impact



## The impact of COVID-19 lockdown in spring 2020 on the mental health of the population

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While the COVID-19 pandemic continues to unfold, it is important to assess the impact of the lockdown measures taken in spring 2020 on the mental health of the general population, and of specific vulnerable groups. In particular, a range of risk factors associated with suicide is expected to be on the rise. Past studies in similar contexts and early evidence collected abroad and in Switzerland show that the current crisis has important psychological consequences for the population

and these can be expected to be long-standing. While levels of stress have increased in an important manner, the release associated with the lockdown has improved the self-reported mental health of other persons. On-line interventions are expected to help prevent some of the adverse consequences, their development will be supported by the acquisition of data documenting well-being and mental health outcomes across groups of the population. ➔

This brief is a summary of the policy brief prepared in the context of the Swiss national COVID-19 science task force (<https://ncs-tf.ch/en/>). While the COVID-19 pandemic and its associated public health measures keep evolving, reviews of previous infectious disease outbreaks leading to quarantine and early evidence in the current context are brought together to discuss the following issues: What is the impact of the spring 2020 lockdown on the mental health of the population? How was the Swiss population affected by the lockdown? What should be done to respond to mental health challenges associated with COVID-19 lockdown?

## The impact of the lockdown measures on the mental health of the population

Public health measures associated with the COVID-19 pandemic are likely to have important mental health consequences, for the whole population and specific vulnerable categories. A range of possible effects are discussed in the literature, they include: boredom, social isolation, stress, sleep deprivation, anxiety, post-traumatic stress disorder, negative mood, depression, suicidal or addictive behaviours, and domestic violence (Mengin et al. 2020). These consequences are likely to be extended in time and might even peak after the pandemic cases (Gunnell et al. 2020). This calls for a close examination of the benefits of the public health measures against their short- and long-term psychological costs (Brooks et al. 2020).

The long-term impact of the pandemic might particularly affect suicide (Gunnell et al. 2020). Increased cases of death by suicide have been reported in the United States during the 1918–19 influenza pandemic and in Hong Kong, especially among elderly people, during the severe acute respiratory syndrome (SARS) epidemic in 2003 (Cheung, Chau, and Yip 2008). In the context of the COVID-19 lockdown, depression, anxiety and possibly post-traumatic stress, all well-known risk factors for suicide, might have developed among the population with no prior mental health problems and worsened among individuals with psychiatric vulnerabilities (Gunnell et al. 2020). Employment loss and financial stress resulting from the lockdown, as well as domestic violence and alcohol consumption, expected to be on the rise, could contribute to increasing the suicide risks. Social isolation, entrapment, and loneliness exacerbated by the lockdown represent additional risk factors for suicide (Gunnell et al. 2020).

Evidence collected in previous similar circumstances, namely outbreaks which led to quarantine, particularly emphasize the adverse psychological consequences of such circumstances on health workers (Brooks et al. 2020). Findings collected in the context of the 2003 SARS outbreak indicate that staff who had been quarantined after potential contact with infected patients

reported more negative mental health outcomes compared to staff who had not been quarantined, but also compared to the quarantined general population (Brooks et al. 2020). In the COVID-19 context, the poorer mental health of health workers documented in Wuhan, China is attributed to a range of factors, including risks of infection with inappropriate protection, physical and emotional fatigue, isolation and limited contact with families (Kang et al. 2020).

Concerns about children's mental health conditions have been voiced. It is known that in non-school periods (over the weekend and during holidays) children accumulate health risk behaviours such as being less physically active, spending more time on screens, having less regular sleep patterns and poorer diets (Wang et al. 2020). All these are likely to have been reinforced during the confinement measures, especially since children and adolescents could have no or only limited outdoor activities.

Due to their heightened COVID-19 vulnerability, the elderly have been defined as a group at risk with recurrent official recommendations asking them to stay at home. Mental health consequences have been discussed in the context of elevated preexisting depressive symptoms, notably in the context of China (Rajkumar 2020) and social isolation (Morrow-Howell, Galucia, and Swinford 2020). Capacities to connect with others, especially family members, depended on technological skills; in an optimistic fashion, the COVID-19 context is presented as an opportunity for improving such skills among older adults (Morrow-Howell, Galucia, and Swinford 2020).

Attention to the impact of the COVID-19 lockdown on the mental health of international migrants workers has also been raised (Liem et al. 2020). This population presents pre-existing mental health difficulties and limited access to healthcare that have been further impacted by the COVID-19 crisis. In addition to difficulties to access adequate information, undocumented workers have particularly missed social protection towards loss of employment since in several contexts, including Switzerland, domestic work has not been included in the governmental economic measures.

## The situation in Switzerland

The Swiss Corona Stress Study was put in place early in the crisis to evaluate how the population was adapting to the pandemic (de Quervain et al. 2020). The objectives were to assess how subjective stress levels and depressive symptoms were affected by the lockdown, to explore underlying factors and to identify potential stress-protecting behaviors. The study was conducted online. More than 10'000 individuals living in Switzerland participated in the first wave over a period of 3 days, starting 3 weeks after lockdown. A second wave with 10'000 participants →

was conducted over the phase of lockdown loosening between May 11 and June 1, 2020.

In the first wave, 24% of the participants reported no change in stress levels, but 50% declared an increase in stress levels during lockdown as compared to the time before the COVID-19 crisis. Several sources contributed to people feeling more stressed during the lockdown, they included the burden related to changes at work or school, problems with childcare or the burden of not being able to spend more time with others.

The changes in stress levels were highly correlated with changes in depressive symptoms. The prevalence of moderately severe or severe depressive symptoms increased from 3% before the corona crisis to 9% during lockdown, of which 20% did not complain about depressive symptoms before the crisis. Prevalence of daily suicidal thoughts raised from 0.8% before the corona crisis to 1.5% during lockdown.

Of note, 26% of all participants showed a decrease in stress levels, which was related to feeling relieved by the lockdown-related changes, and feeling confident to overcome this crisis well. Furthermore, the study identified some behaviors that were associated with a lower incidence of stress, including physical activity, devoting more time to a hobby or a new project and consuming less coronavirus-related news.

In the second wave of data, anxiety levels had decreased as compared to wave 1, but stress levels and depressive symptoms were comparable. The prevalence of moderately severe or severe depressive symptoms remained high (12%) during the loosening period.

The findings of the Swiss Corona Stress Study revealed that the psychological reactions to the pandemic crisis and the countermeasures are very diverse, ranging from an important increase in distress and depressive symptomatology among some to a lockdown-related decrease in stress levels for others. Being older, male and having no prior psychiatric condition protected against the development of depressive symptoms.

## What should be done to mitigate mental health consequences of the COVID-19 lockdown?

Strategies to reduce the COVID-19 lockdown impact on mental health are needed, they should be targeted towards the whole population while providing specific support for vulnerable groups, notably health workers, those with psychopathological

vulnerabilities, and the elderly (Holmes et al. 2020; Brooks et al. 2020). Considering the association observed in the past between the duration of quarantine and poor mental health, it is recommended to keep confinement as short as possible (Brooks et al. 2020). In addition, past research showed that voluntary confinement and emphasis on altruism, rather than compulsion, is less detrimental to mental health (Brooks et al. 2020). This suggests that the federal strategy adopted in Switzerland, as compared to other countries, might have reduced the mental health burden of the crisis.

To respond to the expected psychological consequences of the COVID-19 lockdown, some preventive measures can be put in place to improve well-being, minimize mental health impact and suicide risks (Gunnell et al. 2020; Holmes et al. 2020). Specific emphasis is put on on-line or digital resources and interventions, offering mental health education and emotion regulation strategies, counselling and self-help services (Holmes et al. 2020; Rajkumar 2020).

To alleviate the stress associated with the COVID-19 crisis, the provision of regular, easily accessible, and transparent information is considered crucial. At the same time, it is acknowledged that media communication can fuel anxiety and online communication technologies contribute to disseminate contradictory information and misinformation (Gunnell et al. 2020; Holmes et al. 2020). Their impact on mental health should thus also be monitored.

In order to assess the mental health impact of the COVID-19 crisis and to develop appropriate interventions, evidence on these outcomes among the general population and vulnerable groups needs to be gained (Holmes et al. 2020). It is notably important to monitor the dynamic of psychological consequences, with research following individuals over the successive stages of the crisis, ideally using multiple methods bringing converging evidence with self-reported, behavioral, and physiological measures. Existing cohorts offer particularly important opportunities to set up such monitoring, longitudinal data allowing to document the evolution of mental health before, during and after the lockdown. Setting up new dedicated studies specifically designed to test the mental health effects of the COVID-19 crisis is however also important.

The LIVES Centre offers a large range of opportunities for the monitoring of the mental health consequences of the COVID-19 crisis, through the efforts its researchers have already initiated and will continue to develop, looking at the COVID-19 impact over different stages of the life course and as a result of difficulties encountered across life domains. ■

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