

Covid 19 pandemic

Swiss scientists argue about the benefits of the lockdown Alain Meyer

Was it necessary to shut down a large part of Switzerland for almost two months to fight the spread of Covid-19? An expert in disaster management fears that the drug was ultimately worse than the disease. The debate has been launched while the Swiss population is taking steps out of the lockdown.

"The compartmentalisation - or closure - of European countries has led to a result that we have been able to quantify, namely a reduction in deaths in the region of 50 people per million inhabitants".

According to calculations by the team led by Didier Sornette, professor of entrepreneurial risk at the Swiss Federal Institute of Technology in Zurich (ETHZ), the lockdown in Switzerland, which was further relaxed on 11 May, saved the country from 400 more deaths.

This in comparison to less strict restrictions, as seen for example in Sweden. So far, around 1800 people in Switzerland have died of causes associated with Covid-19.

The calculations and comments of the expert in epidemiological and nuclear disaster management have hit the scientific world like a small bomb.

In retrospect, Sornette critically assesses the method of initial limitation or "lockdowns": "A brutal, medieval instrument of last resort when one is without weapons or in a state of maximum uncertainty".

Since Covid-19 was probably already present in Switzerland at the beginning of the year, the relatively late restriction of freedom of movement had only had a relatively small effect.

"Fell asleep at the wheel"

"It's always easier to present such calculations two months later," says Didier Trono, member of the Covid-19 task force, the scientific advisory body set up by the Confederation and himself a professor at the Laboratory of Virology and Genetics at the Swiss Federal Institute of Technology in Lausanne (EPFL).

When the first restrictive measures were imposed, "we did not know, not even we scientists, whether the barrel would overflow in Switzerland or not. And whether the hospital structures would even be able to cope with this situation," says Trono.

Didier Sornette, for his part, is convinced that, as far as prevention is concerned, the process has already been mismanaged. "We fell asleep at the wheel," he told swissinfo.ch.

"First we watched as the importance of this pandemic, which was developing in China, was trivialised. Then came the criticism of China as an allegedly incompetent country whose approach was considered too restrictive. And when Covid-19 finally came to us, we were not sufficiently prepared."

There was panic in certain European countries, and "several of them started imitating China, but did less well. We shouldn't have restricted freedom of movement so brutally and extensively, but we should have targeted the hot zones and epicentres," says Sornette.

Didier Trono counters this: "Covid-19 spread like ink on blotting paper in certain regions - Ticino, Basel and the Lake Geneva region - with several simultaneous entry points in a population that had no specific immunity at all. We were confronted with a virus that we did not know and with the speed at which it spread. We had to act urgently."

At the time, no direct thought was given to the collateral damage of a lockdown, "because human health and the protection of the medical-clinical system were paramount".

The value of a life

For Didier Sornette, it was originally thought that SARS-Cov-2 - in terms of mortality rate - "is comparable to the Asian flu of 1957 and Hong Kong flu of 1968, two epidemics that could be absorbed with a mortality rate of 0.2% of infected people". This had led to a million deaths worldwide at the time, mostly among vulnerable people. "Of course these figures are tragic, but it's not the end of the world either," he says.

"More recently, it seems to have been confirmed that the mortality rate among those infected tends to be in the range of 0.8 to 1%," Sornette continues. "But even this figure is misleading because it hides enormous differences, by a factor of 1000 or more, between healthy people and frail or elderly people with severe comorbidity. People should have been selectively protected and must continue to be protected".

Didier Trono replies: "The flu mentioned by my colleague was not as rapid as Covid-19, even if they can indeed be called mini-pandemics. The fact remains that estimating how much a life is worth is a delicate matter."

However, he does not deny that such questions arise in hospitals, for example when an elderly person is to be transferred to intensive care. "Difficult decisions have to be made, knowing that some people only have a 10% chance of survival."

Balanced decisions

In Zurich, Didier Sornette lays the foundation for a formula that is to be more comprehensive: "Are the lives saved by a curfew or a partial curfew compensated by the lives endangered by it?"

For Didier Trono, "it makes sense to ask this question. But not to answer it, but to start now to prevent long-term side effects and prevent the epidemic from flaring up again while the restrictive measures are relaxed".

For some time, Didier Sornette and his team have been analysing behavioural chain reactions triggered by experiences with measures to restrict freedom of movement. The researchers want to find out whether these reactions will have more serious consequences than Covid-19. In particular for the health and psychological balance of people, as well as in relation to the disruption of food chains. Such interruptions could threaten millions of people around the world with famine.

Sornette's approach advocates "balanced choices" that are short, medium and long-term. And he regrets that there are no paediatricians or cardiologists on the scientific task force that has been monitoring and advising government and authorities on their decisions since March.

"But neither economists, nor specialists in supply chain management". Sornette criticizes the authorities mainly for having - in this case - only one ear for scientists "with a single narrow specialty".

While people in Switzerland have recently started to learn to live more or less normally again, Didier Sornette also wants to promote what he calls in his jargon "individual resilience". A consideration of the individual, while "we concentrate on social responses".

Disassembling models

In his own way, the Zurich expert challenges the world of science: "I find the conclusions of the models used by epidemiologists too fragile. They are not people of action. They have silo knowledge and are administrators of a method for expanding and testing knowledge in this medical field."

As an advisor to the Federal Council in the Covid-19 Task Force, where he heads the Diagnostics and Tests Group, Didier Trono does not see himself as a "geek", a geek who works behind closed doors in the service of the Swiss Confederation.

"This task force is undoubtedly made up of epidemiologists, but it is made up mainly of doctors, economists, biologists and other specialists in relevant fields," he says. "In addition, both my colleagues and I are in regular contact with all sectors, including the private sector, at national and international level".

The vulnerability of models is nothing new under the sun, the specialist in infectious diseases continues. "A model serves as a guide for reflection. I often tell my colleagues that you have to formulate a model and then try to break it down to make further progress..."

The Swedish model

Didier Sornette believes that a less strict lockdown would have been sufficient in Switzerland thanks to social distancing, barriers and the protection of specific risk groups. And like others, he cites politics in Sweden as a possible alternative. There, people were granted fewer restrictions, i.e. more freedom of movement. But "even there, this will still have to be assessed in the medium and long term, on the basis of whether or not there will be a second wave, and in view of the health and economic consequences".

Didier Trono puts the success of the Swedish model into perspective: "It doesn't work so well when you look at the number of deaths from Covid-19 and the daily number of new cases in this country".

And in practice, "the Swedish model has similarities with the Swiss method. A large proportion of people work from home, many cafés and restaurants are not open, and the population respects the distance rule."