

COVID-19 – an interim review

or

an analysis on the **ethics**, the **medical facts**
as well as the current and future **political**
decisions

Thoughts from a worried Swiss Citizen

by

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Preface: why do I speak out about it at all?

Out of five reasons:

1. With my foundation «EurAsia Heart - A Swiss Medical Foundation» I have been working in Eurasia for over 20 years now. I have worked in China for almost a whole year and for over 20 years I have had an ongoing connection to “Union Hospital of Tongji Medical College/Huazhong University of Science and Technology” in Wuhan where I hold one of my four positions as a visiting professor. This connection to Wuhan has been unwavering, also in current times.
2. COVID-19 is not only problematic in terms of mechanical ventilation but also significantly affects the heart. 30% of all patients that don't survive the intensive care unit are dying due to cardiovascular reasons.
3. The last possible therapy for lung failure is an invasive cardiological or cardiosurgical one: the use of "ECMO", the method of "extracorporeal membrane oxygenation", i.e. connecting the patient to an external artificial lung which can take over its function, until the lung heals.
4. I have - quite simply - been asked for my opinion.
5. The media's coverage of facts, ethics, racism and eugenics, as well as a great deal of reader comments, shouldn't be accepted without criticism. They urgently need to be corrected through reliable data and information.

The facts presented are taken from scientific papers that have undergone peer review and have been published in the best medical journals. Many of these facts were known by the end of February. If these medical facts had been known and if we had been able to separate ideology, politics, and medicine, Switzerland would most probably be in a better position today: we would not have the second most COVID-19 positive people per capita worldwide and a significantly smaller number of people would have lost their lives in this pandemic. In addition, we would most likely not have a partial, incomplete "lock-down" of our economy and no controversial discussions about how to "get out" again.

I would also like to point out that I can provide all mentioned scientific papers in their original form.

1. The Numbers in the Media

It is understandable that everyone wants to understand the extent of this pandemic in one way or another. However, daily calculations do not help us, because we do not know how many people had contact with the virus without any consequences and how many people actually became ill.

The number of asymptomatic COVID-19 carriers is important in order to make assumptions about the spread of the pandemic. But in order to have useful data, broad mass testing would have been necessary at the beginning of the pandemic. Today we can only guess how many

Swiss people had contact with COVID-19. Already on March 16th 2020 American and Chinese scientists published a paper, stating that for every 14 documented cases of COVID-19 positive people, 86 undocumented cases are expected.

Thus, in Switzerland 15 to 20 times more people must be expected to be COVID-19 positive than is shown in daily calculations.

To assess the severity of the pandemic, we would need other data:

- An exact, globally valid definition of when one is officially diagnosed as "suffering from COVID-19", with the following as possibilities:
 - Positive laboratory test + symptoms
 - Positive laboratory test + symptoms + corresponding findings in the CT scan of the lung
 - Positive laboratory test, no symptoms, but corresponding findings in the CT scan of the lung
- The number of hospitalized COVID-19 patients in the general ward
- The number of COVID-19 patients in the intensive care unit
- The number of ventilated COVID-19 patients
- The number of COVID-19 patients under ECMO
- The number of deceased COVID-19 patients
- The number of infected doctors and nurses

Only numbers like these would give insight into the severity of this pandemic and thus the danger of this virus. The current set of data is inaccurate and interpreted by "sensational press" - the last thing we need in this situation.

2. "A common flu."

Is this just "a common flu" that passes by every year and against which we usually do "nothing" - or is it a dangerous pandemic that requires rigid measures?

To answer this question, we certainly don't need to ask statisticians who have never seen a patient before. In any case, a purely statistical assessment of this pandemic is immoral. **We need to ask the people at the front.**

Not me, nor any of my colleagues, and none of the nursing staff can ever remember a time when over the course of 30 or 40 days the following conditions prevailed:

1. Whole clinics are filled with patients who all have the same diagnosis.
2. Whole intensive care units are filled with patients who all have the same diagnosis.
3. 25%-30% of the nursing staff and medical professionals acquire exactly the same disease as the patients they care for.
4. There were not enough ventilators available.

5. A patient selection has to be made. Not for medical reasons but because the sheer number of patients simply means that the appropriate materials are lacking.
6. The more seriously ill patients all showed the same uniform clinical picture.
7. All who die in intensive care die similarly.
8. Drugs and medical supplies are in danger of running out.

Based on points 1-8 it is clear that the virus underlying this pandemic is a dangerous one.

The claims that an "influenza" is just as dangerous and costs the same amount of victims every year are false. The statement "it's unknown who is dying with and who is dying "because of" COVID-19" is also unfounded.

Let's compare influenza and COVID19: one gets the feeling that in the case of influenza all patients have always died "because of" influenza and never "with" influenza. Are we doctors in the COVID-19 pandemic suddenly so stupid that we can no longer distinguish whether someone dies "with" or "because of" COVID-19 when these patients have typical symptoms, typical laboratory findings and a typical lung CT? Aha, while diagnosing "influenza" of course everyone has always been wide awake, has always made the effort to diagnose completely and was always sure - concerning influenza everyone dies "because of" and all of a sudden with COVID-19 many die "with" it.

Moreover, if there were allegedly 1600 influenza deaths in Switzerland in one year, we are talking about 1600 deaths over 12 months - without preventative measures. However, COVID-19 caused 600 deaths in 1(!) month despite massive countermeasures. Radical countermeasures can reduce the spread of COVID bei 90% - so one can imagine what scenario would prevail without countermeasures.

Furthermore, in one month, >2200 patients were hospitalized in Switzerland because of COVID-19 and up to 500 patients were hospitalized in different intensive care units at the same time. None of us have ever seen such conditions in the context of "influenza".

In the context of an "ordinary" influenza about 8% of caretakers also acquire influenza, but nobody dies from it. With COVID-19, 25% to 30% of caregivers become infected and this is associated with a significant mortality rate. Dozens of doctors and nurses who cared for COVID-19 patients have died from the same infection.

Also, look for the hard numbers on "influenza"! You will not find any. What you will find are estimates: About 1000 or 1600 in Switzerland, about 8000 in Italy, about 20,000 in Germany. An FDA (US Food and Drug Administration) study has investigated how many of the 48,000 influenza deaths in the USA in one year really died because of classical influenza pneumonia. The result: all sorts of disease patterns were subsumed under "death from pneumonia", including the pneumonia of a newborn baby who aspirated amniotic fluid into the lungs at birth. In this analysis, the number of patients who effectively "died of influenza" dropped dramatically to well below 10,000.

Even in Switzerland we do not know the exact number of patients who die of influenza every year. Despite dozens of massively overpriced data collection systems. Despite pointless

double and triple data collection by clinics, health insurance companies and health directorates. Despite a pointless and overpriced DRG systems that produce nothing but nonsense. We cannot even provide exact figures of hospitalized influenza patients per month! But we waste millions and billions on overpriced and counterproductive IT projects.

Overall, based on the current state of knowledge one cannot speak of an "ordinary flu". And that's why targeted build-up of herd immunity is not a recipe. A recipe, nota bene, which Great Britain, the Netherlands and Sweden have tried and successively abandoned.

Due to the current lack of knowledge, the figures for the month of March do not tell us anything. We can get off lightly or experience a catastrophe. Rigid measures will result in a flatter sickness curve. But it is not only about the height of the curve, it is also about the area under the curve and this area ultimately represents the number of deaths.

3. "Only old and sick patients die." Percentages - secondary diagnoses - morality and EUGENICS

The age of those who die in Switzerland lies between 32 and 100 years old. Additionally, there are some studies and reports showing that children died of COVID-19 as well.

Whether 0.9% or 1.2% or 2.3% die because of COVID-19 is secondary and only food for statisticians. What is relevant is the absolute number of deaths caused by this pandemic. Are 5000 deaths less bad if they represent 0.9% of all COVID-19 carriers? Or are 5000 deaths worse if they represent 2.3% of all COVID-19 carriers?

Allegedly, the average age of deceased patients is 83 years old, which is probably dismissed by many - by too many in our society - as negligible.

The casual acceptance of other people's death cannot be ignored in our society. The opposite situation I know well enough. The sudden shouting and immediate accusations when it happens to oneself or one's next of kin.

Age is relative. One US presidential candidate is now 73 and the other one is 77 years old. Achieving a high self-determined age with a good quality of life is a great good for which we in Switzerland have invested. And it is the result of medicine that it is possible to reach a high age with a good quality of life even with three secondary diagnoses. Are these positive achievements of our society suddenly no longer worth anything? Even more so, are they now just a burden?

Moreover, if 1000 over 65-year-olds or 1000 over 75-year-olds who previously thought they were healthy are examined, then probably >80% would now have 3 "secondary diagnoses", especially when it comes to the widespread diagnoses of "high blood pressure" or "high blood sugar".

Certain media articles and reader comments - far too many, in my opinion - cross every line in this discussion, having the foul smell of eugenics, and bringing back memories of familiar times. Do I really have to mention those dates? **It surprises me that our media are not making any effort to be clear on this matter. After all, it is our media that publish these**

pathetic expressions of opinion in their commentary columns and leave them there. And it is equally surprising that the politicians do not consider it necessary to make a clear statement on this point for once.

4. This pandemic was announced

Was Switzerland minimally prepared for this pandemic? **NO**.

Were precautions taken when COVID-19 broke out in China? **NO**.

Was it known that a COVID-19 pandemic would sweep across the world? **YES, IT WAS ANNOUNCED AND THE DATA WAS AVAILABLE.**

1) SARS occurred in 2003.

2) MERS occurred in 2012.

3) In 2013, the German Bundestag discussed disaster scenarios like how Germany should prepare for disasters such as floods. It was also discussed how Germany should react to a future SARS pandemic! Yes, in 2013 the German Bundestag simulated a SARS corona pandemic in Europe and Germany!

4) In 2015, an experimental joint paper was published by researchers from three US universities, Wuhan and an Italian researcher from Varese, who has a laboratory in Bellinzona. They synthetically produced coronaviruses in the laboratory and infected cell cultures and mice. The reason for their work was to produce monoclonal antibodies or a vaccine in order to be prepared for the next corona pandemic.

5) At the end of 2014, the US government had suspended research on MERS and SARS for one year because of the danger to humans.

6) In 2015, Bill Gates gave a widely respected speech saying that the world is unprepared for the next corona pandemic.

7) In 2016, another research paper was published that dealt with coronaviruses. The "summary" of this publication must be savored, because it is the perfect description of what is currently going on:

"Focusing on SARS-like CoVs, the approach indicates that viruses using the WIV1-CoV spike protein are capable of infecting human alveolar endothelium cultures directly without further spike adaptation. Whereas in vivo data indicate attenuation relative to SARS-CoV, the augmented replication in the presence of human angiotensin-converting enzymes type 2 in vivo suggests that the virus has significant pathogenic potential not captured by current small animal models."

8) In March 2019, the epidemiological study by Peng Zhou from Wuhan stated that, based on the biology of coronaviruses in Chinese bats (among other things), it can be predicted that

there will soon be a renewed corona pandemic. For sure! We simply could not say exactly where and when, but it was clear that China would be the hot-spot.

In principle, these were 8 CONCRETE, EXPRESS WARNINGS WITHIN 17 YEARS that something like this will come. **AFTER WHICH IT'S ALMOST UNSTOPPABLE! Well, it did come, in December 2019, 9 months after Peng Zhou's warning.** And the Chinese inform the WHO after having seen 27 patients with non-fatal atypical pneumonia. **On December 31, the reaction chain of Taiwan started**, which consisted of a total of 124 measures - all published before March 03, 2020. And no, it was not published in a Taiwanese language in an Asian medical journal, but in the "Journal of the American Medical Association" in collaboration with the University of California.

The only thing that had to be done was to enter "bat + coronavirus" into "PubMed", the U.S. National Library of Medicine, from December 31st, 2019 and all data was available. And you only had to follow the publications until the end of February 2020 to know 1) what is coming and 2) what to do.

Uzbekistan ordered its 82 students back from Wuhan in December and put everyone in quarantine. On March 10th, while I was residing in Uzbekistan, after I had been asked for my opinion, I warned the Swiss parliamentarians, Federal Council, FOPH as well as the media.

And what has Switzerland done since China reported to the WHO on 31 December 2019? Our national government, our FOPH, our experts, **our pandemic commission**? It looks like they haven't noticed anything. Of course, the situation is delicate. Should the population be informed? Sow panic? What should we do? They could have at least studied the excellent scientific works of Chinese and American Chinese scientists published in the best American and English medical journals.

At the very least - and this could have been done without informing the population, without sowing panic - the necessary medical material could have stocked. It is a disgrace **that Switzerland, with its 85-billion-dollar healthcare system - in which an average family of four middle-class people is no longer able to pay the health insurance premiums** - is up against the wall after 14 days of lukewarm headwind, has too few masks, too little disinfectant and too little medical material. What has the Pandemic Commission done? **If that doesn't require a PUK, I don't know what does.** But not one that is staffed only by politicians.

And so the administrative failure has continued to this day. None of the measures successfully implemented by Singapore, Taiwan, Hong Kong or China have been applied. No border closures, no border control, everyone could and still can easily immigrate into Switzerland without any checks at all (I experienced this myself on 15 March).

It was the Austrians who closed the border to CH and it was the Italian government who finally stopped the SBB at the end of March and so on and so forth. And still today there is no quarantine for people entering Switzerland.

Was the research group of Antonio Lanzavecchia in Bellinzona consulted? Antonio Lanzavecchia, who was a co-author of the above-mentioned research on synthetically produced coronaviruses? How is it possible that the FOPH writes about a "Silver Lining on the

Horizon" on March 22nd after Mr. Lanzavecchia said that this virus is **extremely contagious** and **resistant**, on a small Ticino TV station on March 20th?

How is it possible that an American-Chinese authored *Science* article on March 6th said that only a combined border closure and a local curfew are effective (which can reduce the spread of the virus by 90%) while the FOPH and the Federal Council say that border closures are useless, "because most people would get infected at home anyway"?

The **wearing of masks** was not considered necessary - but not because its effectiveness had not been proven. **No, because it was simply not possible to provide enough masks.** One would have to laugh if it wasn't so tragic: instead of admitting one's own mistakes and correcting them immediately, they preferred to call in the German ambassador. What was he told? That the 85-billion-euro Swiss healthcare system does not have masks to protect its citizens, nurses and doctors?

The series of embarrassing mishaps can be extended: **hand disinfection**. Recommended because it is effective and already recommended during the Spanish flu. Have we ever heard from our decision-makers which disinfectants are effective and which are not? We haven't, even though on February 6, 2020 a summary of 22 papers was published in the "Journal of Hospital Infection", which already then reported that coronaviruses can survive up to 9 days on metal, plastic and glass. Critically, they also reported which three disinfectants kill the virus within 1(!) minute and which do not. Of course, the right disinfectant could not have been specifically recommended: the citizen would have noticed that there is not enough of it at all, due to the dissolving of the pandemic stockpile in 2018, which was supposed to have ethanol ready (62% to 71% ethanol kills coronaviruses within one minute).

When the difficulties of the pandemic became apparent to the FOPH, it was announced that patients who had to be admitted to intensive care would have bad survival chances anyway. This was in clear contradiction with 4 previously published scientific studies, which unanimously reported that 38% to 95% of all patients who were admitted to intensive care could be discharged home.

I will not mention any further points here. Two things are clear: the pandemic has been announced at least 8 times since 2003. And after its outbreak had been reported to the WHO on 31 December 2019, we would have had 2 months to study the right data and draw the right conclusions. Taiwan, for example, whose 124 measures were published early, has the lowest number of infected people and deaths and has not had to implement an economic lock-down.

The measures taken by Asian countries were qualified as infeasible for us for political and other obscure reasons. One of them: **tracking infected people**. Allegedly impossible and this in a society that outsources its private data to Google, iCloud and Facebook without any problems. Tracking? When I get off the plane in Tashkent, Beijing or Yangon, it takes 10 seconds and Swisscom welcomes me to the respective country. Tracking? No, we do not have tracking.

If you had been better informed, you would have seen that certain countries have managed without rigid measures. In Switzerland, at best semi-rigid measures or no measures at all have been taken, **but the population has been infected in the true sense of the word.** More rigid measures were taken too late. If one had reacted, one might not have had to take such

measures - and could spare oneself the current discussions about an "exit". I won't even talk about the economic consequences.

5. Political Aspects - Propaganda

Why didn't they look at Asia? There was plenty of time. Or in other words: how did they look at Asia? The answer is clear: arrogantly, ignorantly and in a know-it-all fashion. Typically European, or should I say typically Swiss?

Xi Jinping was still being nice when he said that Europe had become the global center of the pandemic in a very short time due to its "narcissism". I would also add arrogance and a boundless know-it-all attitude to his list.

According to journal columns, more and more readers of our media have noticed that we should perhaps stop lecturing others constantly when we ourselves have the highest rate of COVID-19 positive people per capita together with Spain, as well as one of the highest death rates.

Europe seems unteachable. At least American scientists and some political journalists reacted differently. America has recognized the excellent scientific work of Chinese authors and published it in their best medical journals. Even in "Foreign Affairs", the most important essay journal on international politics, there are works with headlines such as: "What the world can learn from China"; and "China has an app and the rest of the world needs a plan"; and that "international cooperation among scientists is an example" of how "multidisciplinary cooperation" is needed in other fields and how the world is just "interconnected". Even the often quoted Anthony Fauci, Trump's chief virologist, praised the cooperation with Chinese colleagues in "Foreign Affairs".

The fact that the US political leadership did not implement this is not the problem of the scientists, who, including WHO, praised the excellent work of the Chinese: "the Chinese know exactly what they are doing"; "and they are really, really good at it".

On the other hand, the German magazine DER SPIEGEL published an article entitled "Deadly Arrogance" and by this they did not mean America, but the arrogant Europe.

What are the facts?

- a) After the SARS epidemic, China set up a monitoring program to report conspicuous accumulation of atypical pneumonia as early as possible. When 4 patients in this country with its gigantic population showed atypical pneumonia within a short time, the monitoring system triggered an alarm.
- b) After 27 (other sources say 41) patients in Wuhan were diagnosed with atypical pneumonia, still without a single death, the Chinese government informed the WHO on the 31st of December.
- c) On January 7, 2020, the same Peng Zhou team that had warned of a corona pandemic in March 2019 passed on the fully defined genome of the causal virus to the

world, so that test kits could be developed, vaccination research conducted and monoclonal antibodies produced as quickly as possible worldwide.

d) Contrary to the opinion of the WHO, in January the Chinese enforced Wuhan with a "travel ban" and a curfew.

I will spare myself from going into the other measures that have been taken in China. According to international research teams, China has saved the lives of hundreds of thousands of patients with these early and radical measures.

e) On December 31, 2019, Taiwan stopped all flights from Wuhan. The other 124 measures taken by Taiwan have been published in the Journal of American Medical Association - in a timely fashion. If only they had been taken note of.

There is no doubt that China's "command and control" structure initially led to the suppression of relevant information, but conversely it worked all the more effectively in limiting the pandemic later on. The Chinese government's treatment of eye doctor and whistleblower Li Wenliang was horrible, but isn't surprising given the circumstances. In 1918, when the American country doctor Loring Miner in Haskell County, Kansas, saw several patients with flu symptoms that surpassed anything he had seen before, he turned to the United States Public Health Service for help. They refused. Three patients from Haskell County were called up for military service. Albert Gitchell, the kitchen sergeant - patient ZERO - spread the virus in the company he was cooking for, which was transferred to Europe. Forty days later there were 20 million infected and 20,000 dead in Europe. The 1918 pandemic caused more deaths than the First World War.

The complaints of the West about the "treatment" of Li Wenliang are justified, but dripping with double standards, one knows what fate befalls whistleblowers in the West with its great values. The US government also tried to filter medical information by instructing America's Trump-assigned leading virologists to first discuss every public statement with Mike Pence, the Vice President. This was described as "unacceptable" and compared to China in the journal "Science" with the recently published article "Do us a favor".

Politics is one thing; scientific work is another. By the end of February 2020, so many excellent scientific papers with Chinese and mixed American-Chinese authors had been published that one could have known what this pandemic was about and what one should take precautions against.

Why did we miss everything?

Because politicians, the media and the majority of citizens are not able to separate ideology, politics and medicine in such a situation. Viral pneumonia is a medical problem, not a political one. Thanks to the politico-ideologically motivated ignorance of medical facts, Europe has made itself a worldwide pandemic center in a very short time - in the middle of it all is Switzerland with the second-highest per capita infection rate.

Politics and media play a particularly detestable role here. Instead of concentrating on their own failures, the population is distracted by continued, mindless China bashing. In addition, as always, seemingly infinite criticism of Russia and Trump. You don't have to like Trump by

any means - but until the US reaches Switzerland in terms of COVID-19 deaths per capita, it would have to have 30,000 deaths.

How can you constantly criticize other countries when you have the second most infected people per capita with the second most expensive health care system in the world and you have neither enough masks, nor enough disinfectants, nor enough medical material? Switzerland was not surprised by this pandemic - after 31 December 2019, it has had at least two months to take the most urgently needed precautions. The media has certainly contributed enough to this behavior by criticizing other countries while limiting its own coverage of the virus to pretty words, prescribed by the Federal Council and FOPH.

There are enough examples of mindless China bashing: "the Chinese are to blame!". Anyone who makes such claims knows nothing about biology and life in general. "All pandemics come from China": the Spanish flu was in fact an American flu, HIV came from Africa, Ebola came from Africa, swine flu from Mexico, the cholera epidemic of the 1960s with millions of deaths from Indonesia and MERS from the Middle East with Saudi Arabia as its center.

Yes, SARS came from China. But the Chinese, unlike us, have learned, as "Foreign Affairs" wrote on 27 March 2020: "Past Pandemics Exposed China's Weakness. The Current One Highlights Its Strengths".

If it is constantly claimed that the figures China is publishing on the COVID 19 pandemic are unreliable anyway, then what does that mean? Does it mean that we should simply ignore them? Or does it just mean that - if these figures really are unreliable - that this is a much more dangerous pandemic for which we in Europe should take precautions? So much for the logic of pointless political post-pandemic chatter.

Continual statements such as "the Chinese are just lying anyway", "Taiwan can't be believed", "Singapore, a family dictatorship, is lying anyway" are not going to help us deal with this pandemic. Here, too, the US magazine "Foreign Affairs" - certainly not China-friendly per se - acts more intelligently, as can be read on 24 March 2020: "The U.S. and China Could Cooperate to Defeat the Pandemic. Instead, Their Antagonism Makes Matters Worse". And on March 21: "It Takes a World to End a Pandemic. Scientific Cooperation Knows No Boundaries - Fortunately".

I can only welcome the criticism from Lukas Bärfuss. Especially his statement:

"Why are the factories in question now in Wuhan, and no longer in Biberist? Perhaps this allocation problem is not just about cellulose, but also about information, education, food and medicine".

This statement hits the mark and unmask our arrogance and ignorance.

Isn't it enough that at the beginning of this pandemic the West looked to China with arrogance and a certain malicious glee? Must the support of the Western states by China now also be maliciously defamed? To date China has supplied 3.86 billion masks, 38 million protective suits, 2.4 million infrared temperature measuring devices and 16,000 respirators. It is not

China's alleged claim to world power but the failure of Western countries that has led to the West literally hanging on to China's medical drip.

6. Where does this virus come from?

There are approximately 6400 species of mammals on our planet. Bats make up 20% of the mammalian population of which there are 1000 different species. They are the only mammals that can fly, which explains their large radius of movement.

Bats harbor a myriad of viruses. It is likely that bats were the entry point for viruses into the mammalian family tree in the history of evolution.

There are numerous dangerous viruses that have jumped from bats to humans and are responsible for many diseases: measles, mumps, rabies, Marburg fever, Ebola and other, rarer, but not less dangerous diseases. In other mammals too, viruses derived from bats have repeatedly led to mass deaths in pig, chicken or bird breeding.

These are biological processes that are millions of years old in terms of developmental history. Even in the DNA of healthy people there are remains of viral gene sequences that have been "built in" over thousands of years.

SARS and MERS have intensified research on coronaviruses, precisely because a new coronavirus epidemic or pandemic was expected soon. 22 of the 38 known coronaviruses, which are far from being definitively classified, have been studied by Chinese researchers extensively, see Peng Zhou's publication on the epidemiology of "bat coronaviruses in China" and the other publications by American authors mentioned above. In March 2019 Peng Zhou predicted a new corona epidemic soon for the following reasons:

- a) High biodiversity in China.
- b) High number of bats in China.
- c) High population density in China = close coexistence between animals and humans.
- d) High genetic variability of bats, i.e. a high probability that the genome of individual coronavirus types can change spontaneously within the framework of random mutations.
- (e) High active genetic recombination of coronaviruses, i.e. coronaviruses of different types exchange genome sequences with each other, which can then make them more aggressive for humans.
- f) The fact that many of these viruses - coronaviruses, but also Ebola or Marburg viruses - reside together in bats and can exchange genetic material at random.

Although not proven, Peng Zhou also addressed the **eating habits of the Chinese**, which increase the likelihood of these viruses being transmitted from animals to humans. Peng Zhou has warned of a corona pandemic in his March 2019 article. And he wrote that he could not

say when exactly and where this pandemic would break out, but that China would most likely be a hot-spot. So much for scientific freedom. Peng Zhou and his group from Wuhan have continued their research and it was they who identified the genome of COVID-19 on January 7 and communicated it to the whole world.

There are 4 theories for how this virus spread to humans:

- 1) The COVID-19 virus was transmitted directly from a bat to humans. However, the bat version of the virus, which is 96% genetically identical to the current "COVID-19" virus, is structurally unable to dock to the "angiotensin-converting enzymes" (ACE) type 2 in the lungs. The virus needs this enzyme in order to be able to penetrate the lung cells (and the cells of the heart, kidney and intestine) to destroy them.
- 2) A COVID 19 virus was transmitted to a human from the pangolin - a Malaysian mammal with scales, which had been illegally imported into China - and was initially not pathogenic. In the course of consecutive human-to-human transmissions, this virus adapted to the conditions present in humans by mutation or adaptation and was finally able to dock to the ACE2 receptor and enter the cells, thus starting the pandemic.
- 3) There is a parental strain of these two COVID-19 viruses that has unfortunately remained undiscovered until now.
- 4) It is a synthetic laboratory virus, because this is exactly what has been researched and the biological mechanism of the pathogenesis has already been described in detail in 2016. The virologists who were consulted naturally deny this possibility, but they cannot exclude it either, as can be read in the recently published "Nature Medicine": "The proximal origin of SARS-CoV-2" by Kristian Andersen.

The special thing about these facts is that coronaviruses can live together with the Ebola virus on one and the same bat without the bat becoming ill. On the one hand, this is scientifically interesting, because perhaps immune mechanisms can be found that explain why these bats do not fall ill. These immune mechanisms against coronaviruses and the Ebola virus could provide insights that are important for Homo sapiens. On the other hand, these facts are disturbing because it is possible to imagine that due to the high, active, genetic recombination, a super-virus could be formed which has a longer incubation period than the current COVID-19 virus, but which has the lethality of the Ebola virus.

SARS had a 10% mortality rate while MERS was at 36%. It was not to the credit of Homo sapiens that SARS and MERS did not spread as quickly as the current COVID-19. It was just luck. The claim that a virus that has a high mortality rate cannot spread because it kills its host far too quickly was true at the time when an "infected" camel caravan set off from X'ian towards the Silk Road and, because of the high mortality rate, did not arrive at the next caravanserai. Today the situation is much better. Today everyone is massively networked. A virus that kills in 3 days is still going around the world. Everyone knows Beijing and Shanghai. I've known Wuhan for 20 years. None of my colleagues and friends have ever heard of Wuhan. But have you seen how many foreigners there were in Wuhan - in a city that "nobody" knows - and how they were distributed in a flash to all regions of the world? That is the situation today.

7. What do we know? What do we not know?

We know:

- (a) That it is an aggressive virus.
- (b) That the mean incubation period is 5 days, while the maximum incubation period is not yet clear.
- (c) That asymptomatic COVID-19 carriers can infect other people and that this virus is "extremely contagious" and "extremely resistant" (A. Lanzavecchia).
- d) We know the population is at risk.
- e) That it has not been possible to develop either a vaccine or a monoclonal antibody against coronaviruses in the last 17 years.
- f) It has never been possible to develop a vaccination against any coronavirus.
- g) That even the so-called "flu vaccination" has only a minimal effect, contrary to common advertising.

What we do not know:

- a) Whether or not there is immunity after undergoing infection. Certain data indicate that humans can develop G-class immunoglobulins from day 15 onwards, which should prevent reinfection with the same virus. But it has not yet been definitively proven.
- b) How long any immunity could be protective.
- c) Whether this COVID-19 virus remains stable, or whether in autumn, analogous to the usual wave of influenza, a slightly modified COVID-19 will again spread all over the world, against which there is no immunity.
- d) Whether the higher temperatures of summer will help us, because the COVID-19 envelope is unstable at higher temperatures. It must be mentioned here that the MERS virus had spread in the Middle East in the months of May to July, when temperatures were higher than they ever are in our country.
- (e) How long it takes for a population to become so infected that the R_0 value is <1 .

If you test 1 million people in Zurich at any given time, let's assume that 12% to 18% would currently be reported to be COVID-positive. In order for the pandemic to lose its pandemic character, the R_0 value must be <1 , i.e. about 66% of the population must have had contact with the virus and developed immunity. Nobody knows how long, how many months it will take until the infection, which is currently expected to be 12% to 18%, reaches 66%! But it can be assumed that the spread of the virus from 12% to 18% to 66% of the population will continue to generate seriously ill patients.

f) So, we do not know how long we will have to deal with this virus. Two reports, which should not have been available to the public (U.S.- Government COVID Response Plan and a report of Imperial College London) come independently of each other to a "lock-down" phase of up to 18 months.

g) We do not know whether this virus will concern us epidemically/pandemically or perhaps even endemically.

h) We still do not have a recognized and broadly applicable, defined therapy; we have never been able to present such a therapy for influenza either.

Perhaps authorities and the media should put the facts on the table for once instead of presenting reports every two days of an apparently successful vaccination that is not far away.

8. What can we do now?

Unfortunately, I cannot answer the question about what the best solutions might be. Whether Switzerland can still contain the pandemic at all, or whether the infection of the population will continue unchanged due to overslept measures, is still unclear.

In the latter case, one can only hope that we do not pay for this "policy" with too many dead and seriously ill people. And that not too many patients suffer from the long-term consequences of a COVID-19 infection, such as newly acquired pulmonary fibrosis, disturbed glucose metabolism or newly occurring cardiovascular diseases. The long-term consequences of a sustained SARS infection are documented to be up to 12 years after the alleged recovery. Let us hope that COVID-19 will behave differently.

The lifting of the "lock-down" and the return to what we perceive as normal, is certainly everybody's wish. Nobody can predict which steps in the return to normalization will have adverse consequences - i.e. a resurgence of the infection rate. Every step towards a more comfortable policy is basically a step into the unknown.

We can only say what is not feasible: the idea of actively infecting non-risk groups with the COVID-19 virus is certainly a pipe dream. It can only occur to people who have no idea about biology, medicine or ethics:

1. It is certainly out of the question to deliberately infect millions of healthy fellow citizens with an aggressive virus of which we actually know nothing at all; neither the extent of the acute damage nor the long-term consequences.

2. The greater the number of viruses per population, the greater the probability of a random mutation that could make the virus even more aggressive. We should certainly not actively help to increase the number of viruses per population.

3. The more people are infected with COVID-19, the more likely it is that this virus will adapt even "better" to humans and become even more disastrous. It is assumed that this has already happened once.

4. With government reserves of allegedly 750 billion, it is ethically and morally reprehensible to infect millions of healthy people for purely economic reasons.
5. Deliberately infecting healthy people with this aggressive virus would acutely undermine one of the fundamental principles of medical ethics - "primum nil nocere" or "first, do no harm" - with purely short-term economic concerns. As a medical doctor, I would refuse to participate in such a vaccination campaign.

The measurement of the COVID-19 IgM and IgG antibody concentration in the blood apparently goes hand in hand with the neutralization of the COVID-19 virus. The quantitative and qualitative diagnostics of these antibodies has so far only been investigated in a small clinical study with 23 patients. Whether the mass measurement of antibodies in the blood will make a controlled "lock-down" safer by allowing only non-infectious and no longer infectious people to move freely, for the time being, cannot be answered at present. It is equally unclear when this method will be clinically valid and widely applicable.

9. Future

This pandemic raises many political questions. "Foreign Affairs" with Donald Trump and Anthony Fauci on the cover, writes on 28 March 2020: "Plagues Tell Us Who We Are. The Real Lessons of the Pandemic will be Political".

These political questions will be national and international.

The first questions will certainly concern our healthcare system. With a budget of 85 billion Swiss francs, Switzerland has become the world's second-largest country in terms of the number of corona patients per million inhabitants. Congratulations! What a shame! Basic and cheap material is missing in Switzerland after 14 days. That's what happens when self-proclaimed "health politicians", "health economists" and IT experts invest billions in projects such as e-health, electronic health cards, overpriced hospital information systems (ask the Cantonal Hospital of Lucerne!), tons of computers and "Big Data" and thus, in an act of misappropriation, withdraw billions from the health system. And doctors and FMH are literally too stupid to finally stand up against it. They prefer to be called rip-off artists and criminals every week. Switzerland must finally investigate how much of each million in health insurance money is still spent on medical services that directly benefit patients and how much money is diverted to lobby groups outside the industry that shamelessly enrich themselves on the 85 billion franc cake without ever having seen a patient. And finally, there is of course a need for adequate quality control of medical services. I do not wish to go into further measures regarding the reorganization of the Swiss healthcare system here.

The international issues mainly concern our relationship with China and the Asian countries in general. Critical comments: yes. But constant, mindless "bashing" of other nations cannot be a recipe for tackling global problems together - much less solve them. Instead of parroting pointless propaganda, one should perhaps take a look at authors who actually have something to say in a balanced way at a high level, for example:

- Pankaj Mishra. "From the Ruins of the Empire".

- Kishore Mahbubani. "The ASEAN Miracle. A Catalyst for Peace", "Has the West Lost It?", "Can Asians Think?".
- Lee Kuan Yew. "One Man's View of the World".
- David Engels. "On the Road to Empire".
- Noam Chomsky. "Who Rules the World".
- Bruno Macàes: "The Dawn of Eurasia".
- Joseph Stiglitz: "Rich and Poor".
- Stephan Lessenich: "Next to Us the Flood".
- Parag Khanna: "Our Asian Future".

Reading does not mean that all these authors are right about everything. But it would be of great value to the West - including Switzerland - to sometimes replace its know-it-all attitude, ignorance and arrogance with facts, understanding and cooperation. The alternative is simply to try to eliminate our supposed competitors sooner or later in a war. I think everyone can agree on what we should think of that as a "solution".

One can only hope that mankind will think of something better. Dreaming is always encouraged.

The challenges are global. And the next pandemic is just around the corner. And it may be caused by a super virus and take on a scale that we would rather not imagine.