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## **Incorrect statistics**

Less than 1 percent of those infected with the coronavirus die in the Italian provinces of Bergamo and Brescia, but more than 15 percent of the total population is infected.

by Hans-Peter Zepf

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The coronavirus test in the province of Lombardy provides a 10 percent death rate that has nothing to do with reality as a confusing result. A necessarily rough analysis shows that more than 400 deaths in the province of Bergamo by 18 March 2020 are not based on the official figure of 4,305 infected persons, but on a total of at least 40,000 infected persons. Today's deaths, however, come from those infected about 14 days ago. The number of people infected is expected to have risen to around 150,000 by 18 March 2020, leading to another 1,000 deaths in the next 2 to 3 weeks.

The nationally and internationally published figures of the Corona infected are practically without statement

Due to the nationally completely different systems of carrying out the corona tests, which nowhere remotely capture a relevant population cross-section, the so much-regarded infection rates do not give a good idea of reality. They are practically worthless.

This is primarily due to the fact that only a few countries test a representative cross-section. If only the age group in which serious diseases are observed is tested, the very large number of infections of young people with no or harmless symptoms of the disease is completely disregarded.

Among the countries with the most corona infections by March 22, 2020, only South Korea has conducted a sample survey that is closest to the population cross-section. The deviation, on the other hand, is particularly stark in Italy, where practically only the elderly have been tested.

Therefore, only South Korean statistics can provide an almost realistic statement about the death rate at present. It is just over 1 percent on March 20, 2020, with nearly 9,000 people infected and 94 deaths. It should be borne in mind, however, that, as developments in China have shown, the number of deaths from infections lags by 2 to 3 weeks. If no new infections occur, the sick will continue to die for a long time to go, so that the death rate grows until there are no more sick people.

But even the fairly correct statistics in Korea do not mean that 1 percent of those infected actually die, because even the most extensive data collection in Korea by far in international comparison was far too small to cover all those infected, but all deaths. In addition, the fact that people with the coronavirus does not mean that they also die from the coronavirus. Therefore, only the statistical evaluation will show what percentage of those actually infected have reached the test procedure, which has not yet been carried out.

The death rate, i.e. the ratio of deaths to the number of infected persons identified, is almost 10 percent in Italy, 3,400 deaths for 41,000 people infected on 19 March 2020, and it is constantly growing. In the particularly affected provinces of Brescia and Bergamo, it is even more than 10 percent, as Guilio Gallera, the head of the Lombardy Region Health Authority, explicitly pointed out in his daily press conference on 17 March 2020:

"Even the Lombardy data are not yet reassuring, on the contrary: to date, there are 16,220 positive cases in Lombardy, 1,571 more in one day. From Monday to Tuesday 220 deaths with a total of 1,640, mortality rate 10.11 percent. More than 60 also in Brescia, where the sad total of 387 was reached, with a mortality rate of 11.5 percent.

Die Anzahl der Verstorbenen in der Provinz Brescia entspricht 15 Prozent der Opfer von Italien." The number of deceased in the province of Brescia corresponds to 15 percent of the victims of Italy."

## The first source of error

All patients of Italian hospitals with corresponding symptoms are tested for SARS-CoV-2 infection. If they die with a positive result, they are included in the statistics of coronavirus victims, even if other diseases were ultimately co-or owing to death.

At the press conference of the Lobardei region on 13 March 2020, silvio Brusaferro, President of the Supreme Health Authority, said:

"These are people with an average age of 80.3 years, of which 25.8 percent are women." The main age group at risk is that of 80 to 89 years, but there is another factor that needs to be considered:

"The majority of the victims had additional chronic diseases, only two were not affected by pathological diseases, 46 to 47 percent of the deceased had at least 2 to 3."

Even in normal times without an epidemic, about 250 people die every day in Lombardy.

#### The main source of error

After the first illnesses on February 20, 2020, the contact persons of the patients were first tested, so that people of all ages and many without symptoms. This served the purpose of identifying and isolating potential carriers of the virus.

However, since the entire nation has been quarantined, no one needs to be identified to isolate them. Since then, the testing process in Lombardy has probably changed fundamentally. It should be borne in mind that, in the tense situation in Lombardy, there is absolutely no shortage of medical personnel to carry out corona tests. Most recently, on 19 March 2020, a completely newly installed hospital with 160 intensive care places could not be opened because doctors and nurses are no longer available.

At the regional press conference on 18 May 2020, Guilio Gallera made the following confusing statement:

"The Lombardy region has always followed WHO guidelines. So far, 49,000 corona tests have been carried out in the Lombardy region. From now on, the new instructions apply: Corona tests only in people with symptoms and in those who present themselves with symptoms at the first intake. We have stuck to this path: the staff in the hospitals only

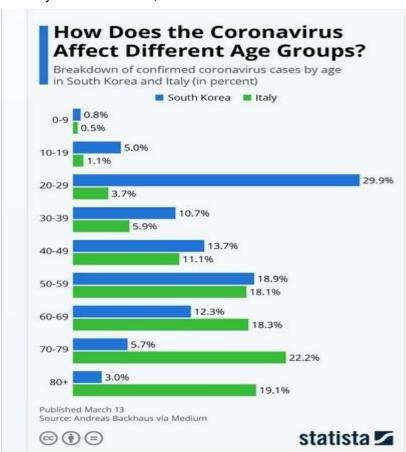
perform corona tests if they have direct contact with the sick. These are the instructions we have always adhered to."

Although this statement is clear, it is hard to believe:

# So tests (still?) are only carried out on people with symptoms of the disease, possibly only on those who are hospitalized?

If the sample selection is such that only seriously ill patients are tested at all, then it is no wonder that a high proportion of those tested also die. All people who are at home with less mistaken symptoms, and the well-known high proportion of young people who are infected and potential carriers of the disease themselves, are never recorded as infected.

There is a statistic that compares the age distribution of infected people in South Korea and tally as of March 13, 2020:



According to this, 30 percent of those infected in Korea would be between 20 and 29 years old, whereas in Italy only 3.7 percent would be? Quite different, the Asians and the Europeans? No, of course they are not: this strange distribution of the infected among the oldest population groups is due to the fact that in Italy only these age groups are tested at all.

But if 20- to 29-year-olds are not tested because they (almost or even) never get sick, then it is no wonder that no infected people are found at this age. The fact that there is still a percentage of 3.7 is the historical reason that at the beginning of the epidemic, tests were still carried out across all age groups.

On the sidelines: It is also clear from the statistics that the Koreans do not test in a nutritious lyre, because such jumps certainly do not make the true age distribution.

Roughly speaking, 70 percent of the population in Italy, all under 65, are not covered by the tests. The reason for this is that almost only the elderly become terminally ill.

In fact, the regional newspapers publish daily stories of suffering from patients, from their relatives when they have died, and from patients on the road to recovery, as in <a href="this:">this</a> 68-year-old patient.

All these reports confirm the above statement by the health authority. When people call the emergency number and report symptoms, no corona test is performed – which was certainly the intention at the beginning of the epidemic – but they are instructed by telephone to take care of themselves at home as long as the symptoms are "mild".

But they are always "mild" for many days, as the 68-year-old Genesis describes: mild fever and great powerlessness. At this stage, therefore, the sick are not even included in the statistics of the infected.

Only when the symptoms escalate, often with sudden shortness of breath, and the emergency delivery to the hospital takes place, the patients become an infection case.

Insiders are already recognizing that data collection in Lombardy overlooks by far the largest number of people infected but has not yet drawn the right quantitative conclusions from it.

When 1 SARS-CoV-2 positive was tested in Codogno on February 20, 2020, authorities were still trying to find Patient 0 who had brought the virus to Italy. As we know today, this is a hopeless undertaking. Presumably, by this time, a large number of people with little or no symptoms of the disease who had never consulted a doctor had spread the virus throughout Lombardy.

This is also confirmed by Alberto Zucchi, responsible for the Department of Epidemic Diseasesof the Bergamo Health Authority, in an interview with the "Eco di Bergamo": "Certainly, many people have been infected since the beginning of January, but because they had no disease symbols, they never went to screening."

It also confirms that Lombardy is finding far too high a death rate for these reasons:

"It is not statistically true that the virus is more deadly than in China."

But it is quantitatively wrong, because the Italian measurements are actually far less threatening than the Chinese ones. The death rate recorded for China so far is 4.5 percent, just over 80,000 infected and 3,200 deaths, but is also far too high, because many of the aspects mentioned here also apply to China.

## What is the death rate really?

So far, there is no real recording of this, because, in view of the confused data available, the person-precise counting method gives a completely wrong picture in terms of reliability and a serious investigation is hardly possible.

Nevertheless, I dare to try to make a rough assessment in an unconventional way, because we have to deal with the obscure figure of 10% death rate in Italy, and I am convinced that it is not very wrong.

### **Calculation data:**

The number of deaths in the province of Bergamo exceeded 400 on 18 March 2020. The health authority's data is roughly rounded: 80 percent of the fatalities are over 80 years old, 75 percent of them are men, and the mortality rate of these men over 80 is 25 percent.

According to Italian statistics, the proportion of the population of men over the age of 80 is 2.4 percent. I assume that this also applies to Lombardy. The population of Bergamo province is 1.1 million. Then about 24,000 men in the province are over 80 years old — right, that's not correct, but it's good to calculate, because the accuracy isn't higher anyway.

Of the 400 deaths, 240 men over the age of 80 are, according to the figures above. Then 1 percent of men over the age of 80 in the province of Bergamo have already died from the epidemic. However, since the death rate at this age is 25 percent, 4 percent had to be infected

Whether it can be assumed that the total population is infected as well as men over 80 years of age is not certain, but there are various statements and also statistical data, for example the statistics of Statista.de linked above with the figures of the Infected in South Korea who justify to assume it.

If the rate of 4 percent is set for the total population of Bergamo, the 400 deaths are based on 40,000 infected people. This would correspond to a mortality rate of 1 percent.

#### **Estimate**

What is rarely taken into account is that the current deaths are due to the infections 2 weeks ago (+/- 1 week, incubation period + disease time until death). However, the death toll in Lombardy has so far increased by about a factor of 3 per week.

Since the nationwide quarantine came into force a week ago and I expect it to be effective, I expect growth of a factor of 4 in the last 2 weeks. This would have turned the 40,000 infected persons into 160,000 two weeks ago, corresponding to a population share of around 15 percent.

If, on the other hand, the quarantine did not work at all, the number of infections would have increased 9-fold in these two weeks, with the previous history continuing, and in the province of Bergamo, around 360,000 people, or 35 percent of the population, would have been infected. infected population.

## **Conclusions**

Everyone in Lombardy is eagerly waiting every day to see if the statistics show an effect of quarantine, and many interpret any rate that may not have risen quite exponentially in a day as an indication of this.

The fact is, however, that there are no indications yet, nor can they be. The number of infections, which are always so much attention paid attention, is, as has been discussed at length, a completely useless number. However, since it is only recorded after the incubation period — as far as I know it still applies for 2 to 14 days — and several sick days at all, it is not to be expected that the effect of the quarantine will be apparent before the end of at least 10 days. However, if one considers the reliable development of the deaths, the quarantine will take effect even later, estimated after 14 days.

From this point of view, it is plausible that the death rate in Italy is in fact similar to that in Korea and in many other countries at around 1 percent. If the number of real infections in the province of Bergamo has really risen to 15 percent and does not rise any further, then at least another 1,000 deaths must be expected, with a drop to zero in about 4 weeks.

If the quarantine does not have the desired effect, which should be known around 25 March 2020, and if infections have increased into the 30 per cent of the population, then further maintenance of the measures will no longer be sensible and effective. Eventually, the infection rate of 60 percent and 6,000 deaths in the province of Bergamo is expected. The same is true in the similarly large and similarly affected province of Bresca.

There are various indications that have not been discussed here, which suggest that these estimates are still too high and that the real death rate is less than 1 percent.

Source: https://www.rubikon.news/artikel/falsche-statistik