Attempt to view in perspective the health hazard posed by the COVID-19 pandemic:

Mortality
between February and the end of May 2020 in Spain
and January and the end of April in Germany
compared to the general death rate
in both countries

Reinhard Wagner, Tenagua, 12 June 2020

"Everyone has the right to clear, accessible, timely and meaningful information about the nature and extent of the threat to their health".
(Esteban Beltrán, Director of Amnesty International's Spanish Section, before the Economic and Social Reconstruction Commission of the Spanish Parliament, European Union Group, 12 June 2020)

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1. Summary

I am grateful for hints on errors and suggestions for improvement:
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1. Summary
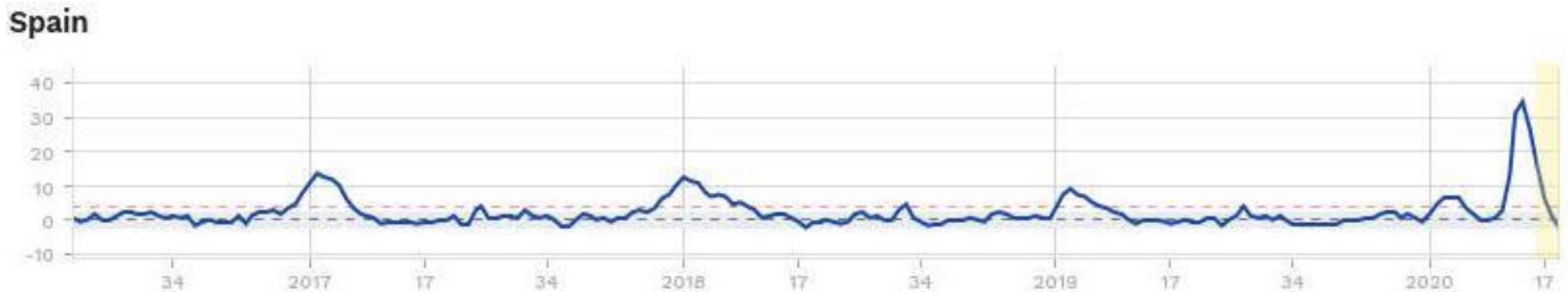
Spain

(8)

The death rate in *Spain* is significantly higher during the period mentioned. This is also confirmed if we look

not only at specific regions or periods of time, but at the entire country and at a period of four months, usual for an influenza epidemic.

Regardless of the way it is viewed or presented, it is an unusual phenomenon in terms of the severity of its course and its timing in the year.

In purely quantitative terms, it is no longer within the range of deaths during the 2017/18 flu epidemic - after the delayed reporting of around 12,000 deaths at the end of May 2020 - **but 6 % above it**, with no extraordinary measures taken at the time of flu in 2017/18.

There was a direct temporal coincidence of excess mortality with the emergence of the new virus and a significantly increased number of deaths with* laboratory-confirmed SARS-CoV-2 infection. This suggests a causal relationship.

While an average of 526 people officially died every day with* COVID-19 from 17 March to 3 May 2020, the 48 days of excess mortality or "first wave", simultaneously 787 people continued to die daily from the usual circulatory system diseases, tumours and other respiratory diseases.

Germany (Berlin)
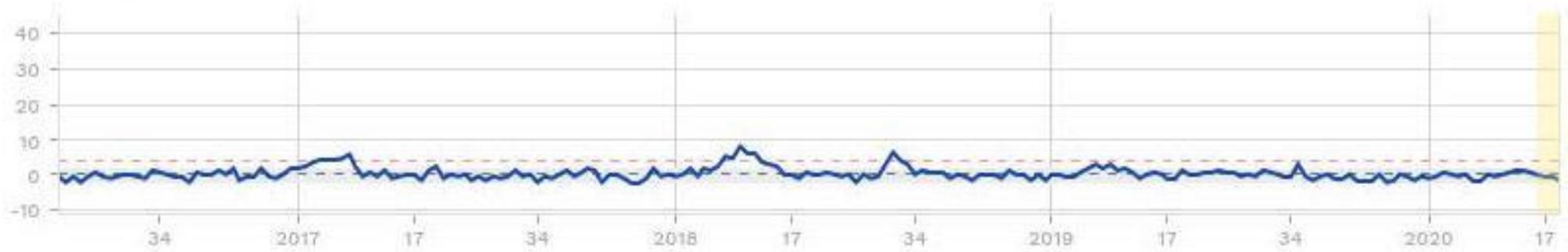
Germany (Hesse)

(8)

In *Germany,* the death rate during the period from January to the end of April 2020 is unchanged and below what happened in previous strong influenza epidemics when no extraordinary measures were taken.

The new virus did not develop statistical significance. Thus, for the deaths with* laboratory-confirmed SARS-CoV-2 infection,
- either the new virus was not the cause
- or the measures taken have led to an overall reduction in mortality, thus statistically offsetting the possible additional COVID-19 deaths

- or a combination of both.

When, from 17 March to 3 May 2020 (the 48 days with excess mortality in Spain, chosen here only for reasons of comparability), an average of 139 people officially died daily in Germany with* COVID-19, simultaneously 1,770 people continued to die daily from the usual diseases of the circulatory system, tumours and other respiratory diseases.

*I present the official data here for reasons of comparability, even though I know that a death **with** a confirmed SARS-CoV-2 infection does not mean that it **caused** the death. The death could have been caused by a different disease or hastened by the infection. Both probably happened in cases where one or more pre-existing conditions were present.

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2. SPAIN

2.1 General mortality pattern

From 2014 to the end of 2018, between 30,000 and 50,000 people died in Spain each month, more in the winter, especially during the flu season, and fewer in the summer, except for periods of intense heat. (3)
The same was true from January to June 2019. (4)
The mortality monitoring page of the Instituto de Salud Carlos III in Madrid (5), the equivalent of the Robert Koch Institute in Berlin, has been providing the corresponding data since December 2019, but the graph shows daily deaths. The monthly figures as comparable data can be determined by using the database provided in .csv format. (6)
The data is updated and corrected daily, even after 5 weeks (7).
Thus, at the end of May 2020, there was an extraordinary delayed reporting of approx. 12,000 deaths. (1)

2.2. Deaths in Spain between February and the end of May 2020

As can be seen on the mortality monitoring page of the Instituto de Salud Carlos III (7) and is also particularly clear from the European Mortality Monitoring (EuroMoMo) charts (8), mortality has been unusually low this flu season, unlike the 2016/17 and 2017/18 flu seasons.

Spain
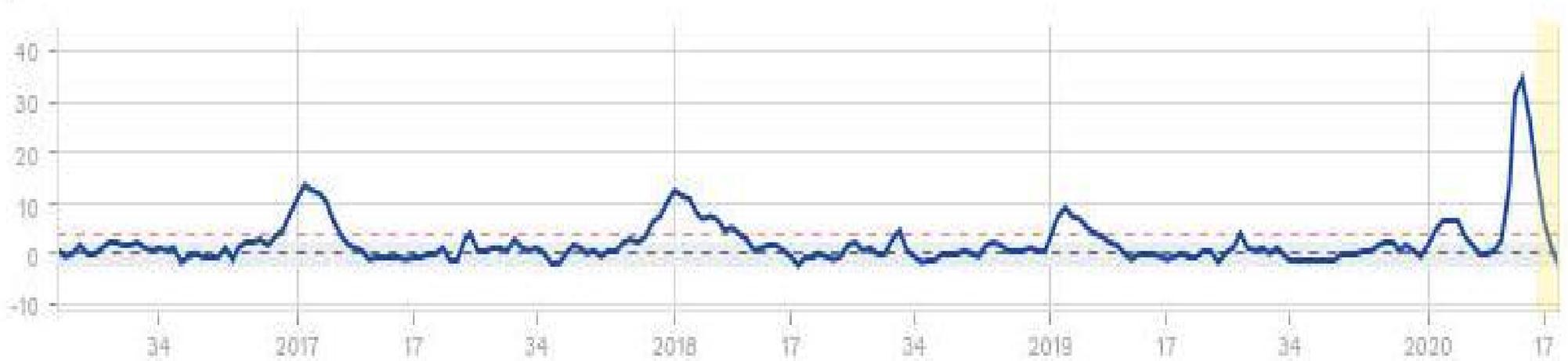
(8)

Particularly striking, however, is the occurrence of deaths in the period between 13 March and 22 May, 2020.
(9)
It can be assumed that this anomaly is due to the new virus, and I will try to place it in the context of the general mortality pattern in Spain by comparing it on the one hand with the mortality pattern during the flu seasons, and on the other hand with some other, constantly present causes and courses of death.

Table 1: Monthly deaths (all causes) in Spain at times of influenza and COVID-19

Flu 2016-17[10]		12/2016	01/2017	02/2017	03/2017	Sum 4 months
		39,188	49,370	37,434	35,779	161,771[13]
Flu 2017/18[10]		12/2017	01/2018	02/2018	03/2018	
		41,665	47,911	39,756	39,772	169,104[13]
COVID-19, *presented by the Centro Nacional de Epidemiología (MoMo-ISCIII) for the period of excess mortality[8]*		02/2020	01/03-12/03	13/03-22/05	23/05-31/05	
	expected[14]	36,926[11]	14,488,5[11]	77,574[12]	9,263,25[12]	138,211,75[13]
	observed	34,584[11]	14,030[11]	120,837[12]	9,659[12]	179,110[13]
	excess mortality[14]			56 % [12]		40,898 persons[13]
COVID-19, *monthly, presented by me in order to achieve comparability*		02/2020	03/2020	04/2020	05/2020	
		34,584[11]	54,463[12]	56,336[12]	33,727[12]	179,110[13]

March and April 2020 are both months with well over 50,000 deaths, which did not occur even in previous strong flu epidemics.

So-called excess mortality, the difference to long-term averages for this time of year (14), is almost 41,000

people for the four-month period.

What is striking is the concentration of excess mortality in a relatively small period of only 10 weeks, the extreme steepness of the curve.

Looking at this four-month period, which is common for influenza epidemics, independent of what is common for the time of year, **the number of deaths is 6 % or about 10,000 people higher than in the 2017/18 influenza epidemic**, and 11% or about 17,300 people higher than in the 2016/17 influenza epidemic. Regardless of how it is viewed or presented, this is an unusual phenomenon in terms of the severity of its progression and its timing in the year. In purely quantitative terms, too, it is no longer within the range of deaths during the 2017/18 influenza epidemic, when no extraordinary measures were taken, but 6% above it (2) - following the delayed reporting of around 12,000 deaths at the end of May (1).

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3. GERMANY

3.1 General mortality pattern

From January 2016 to April 2020, between 69,000 and 107,000 people died in Germany each month, more during the cold season, especially in the flu season, and fewer in the summer, with the exception of extreme heat periods. (15)

3.2. Deaths in Germany between January and the end of April 2020

As can be seen particularly clearly from the European Mortality Monitoring (EuroMoMo) charts (8), mortality was unusually low this flu season, unlike the 2016/17 and 2017/18 flu seasons.

Germany (Berlin)
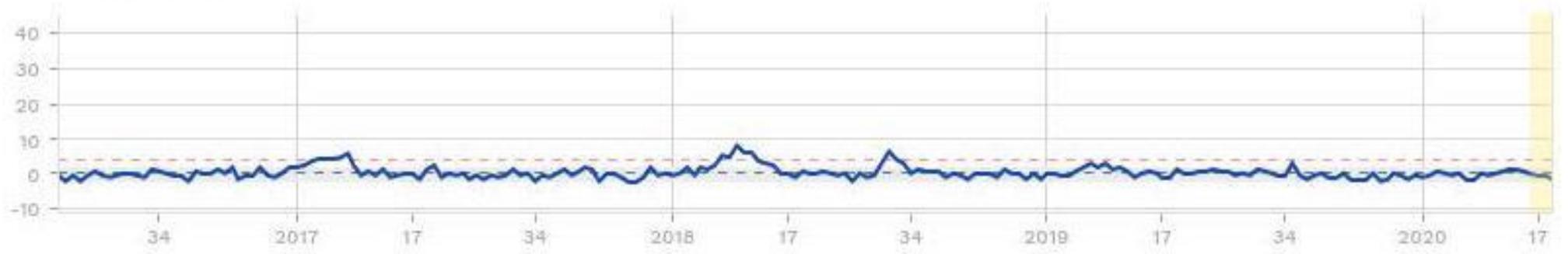
Germany (Hesse)

Table 2: Monthly deaths (all causes) in Germany at times of influenza and COVID-19[15]

	12/2016	01/2017	02/2017	03/2017	Sum 4 months
Flu 2016-17	84,339	96,033	90,649	82,934	353,955
	12/2017	01/2018	02/2018	03/2018	
Flu 2017/18	81,610	84,973	85,799	107,104	359,486
	01/2020	02/2020	03/2020	04/2020	
COVID-19	85,194	79,646	86,825	82,664	334,329

The death rate in Germany during the period from January to April 2020 is unchanged and is below what happened in previous strong flu epidemics in which no extraordinary measures were taken.
The Federal Statistical Office (Statistisches Bundesamt) states a slight excess mortality from the last week of March to the second week of April. (16)
So far (05/06/2020), the statistics are only available up to 10 May 2020. In the 19th calendar week, the number of deaths was no longer above average. (17)

The nationwide German official statistics are usually published with a time delay of 5 weeks. Corrections - as is constantly the case with the Spanish statistics, which are published at very short notice - and updates are therefore still to be expected.

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4. The usual "background" mortality patterns in Spain and Germany compared to deaths with COVID-19

Data	Spain 2018	Germany 2019[22]
Present number of inhabitants	47,100,000[18]	83,100,000[24]
Yearly deaths, all causes	427,721[18]	949,000[22]
Official deaths **with*** COVID-19 up to 3 May, 2020	25,264 [19]	6,649[23]
Official **daily** average of deaths **with*** COVID-19 from 17 March, 2020 until 3 May, 2020 (48 days)	526	139
Daily average of deaths, all causes	1,172	2,600[22]
Daily deaths due to cardiovascular deseases	331[20]	930[22]
Daily deaths due to tumors	309 [20]	650[22]
Daily deaths due to respiratory deseases	147 [20]	190[22]
Daily deaths due to pneumonia	29 [20]	80[22]
Yearly deaths due to pneumonia	10,415	30,000[22]
Nosocomial infections	between 7 und 9% of patients[21]	600,000 per year[22]
Daily nosocomial infections	I have not been able to find data	1,600[22]
Yearly deaths due to nosocomial infections	I have not been able to find data	10,000 - 20,000[22]
Daily deaths due to nosocomial infections	I have not been able to find data	30 - 60[22]

*I present the official data here for reasons of comparability, even though I know that death **with** a confirmed SARS-CoV-2 infection does not mean that it **caused** death. Death could have been caused by a different disease or hastened by the infection. Both probably happened in cases where one or more pre-existing conditions were present.

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5. Open Questions

5.1 What has been the impact of the measures taken in terms of

- reduction in the incidence of death: interruption of infection chains, treatment in hospital;

- an increase in the incidence of death: panic, stress; reservation of capacity that would otherwise have been available for strokes, heart attacks, cancer and other operations; all economic, social, physical and psychological consequences. (2)

5.2 Is the decline of mortality in Spain after 31/03/2020 causally related to the Estado de Alarma's declaration of contact restrictions from 14/03?

This question could be answered by clarifying the average time between infection and death among those who died with COVID-19.

The period between the onset of contact restrictions and the peak of the death curve was 17 days.

According to the data published so far by the Robert Koch Institute (25), the time from infection to death is between 14 days and one month.

Christian Drosten also spoke of one month in a *Spiegel* interview, reproduced in the *Tagesspiegel Berlin* on 29/05/2020. (26)

The final answer to this question is therefore left to future research.

5.3 Were the measures taken in Germany sensible, although even before the introduction of contact restrictions on 22 March 2020 ("lockdown"), according to the Robert Koch Institute, the transmission rate had fallen to below 1? (27)

5.4 Will the virus have its own season in the future in addition to the existing flu season?

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6. Personal follow-up comments in May 2021

Today, a year later, little has changed in my original findings:
At certain times in certain places, what is happening is extraordinary.
On the whole, the pandemic has fortunately been overestimated in its immediate effects determined by the infectious events - at least in Europe, for which I have data - because even in phases of excess mortality presumably triggered by the new virus, the virus remained - unlike in the case of the so-called Spanish flu, the plague and cholera - one of several main causes of death and much less significant than cardiovascular diseases, tumours or other respiratory diseases. As I said, in some phases of excess mortality, but not in that of summer heat.
At other times or in relation to a period of one year, the virus, in terms of virulence, remained far behind the latter, ever-present diseases as a cause of death .

I have not yet compared the death rates of different years myself, but I know of complicated calculations that take into account changes in the population pyramid, which I have not yet been able to verify.

The indirect effects of the measures taken and the fear generated are considerable in economic terms in

particular, but also socially and psychologically, especially for children and the so-called risk groups and for all those who are directly related to these risk groups.

I found the best account of the problem on 02/06/2020 in an interview with Amparo Larrauri, epidemiologist and head of the MoMo team and researcher at the Spanish National Epidemiological Centre:

"The excess mortality observed, (...) 'May be due to confirmed COVID-19 cases, unconfirmed COVID-19 cases that surveillance systems do not identify, and the pandemic indirectly. The latter is very important. **We have experienced a change in the social and health structure, and this has meant that many people with underlying pathologies have not gone to the doctor for a multitude of reasons, such as fear of contagion or that their consultations did not work as they usually did. And a host of reasons that are not medical, but social. Many studies suggest that the fact that a vulnerable, older person has been isolated and in confinement affects their health and evolution more than younger people. Unfortunately, we can all see such cases around us. These are deaths that are not due to COVID-19, but they are related to this whole process.'"** (2) (Emphasis mine.)

["El exceso de mortalidad constatado, (...) 'Puede deberse a casos con COVID-19 confirmada, a casos con COVID-19 sin confirmar y que los sistemas de vigilancia no identifican, y a la pandemia de manera indirecta. Esto último es muy importante. **Hemos vivido un cambio de estructura social y sanitaria, y eso ha provocado que muchas personas con patologías de base no se hayan acercado al médico por multitud de razones, como que temían el contagio o que sus consultas no funcionaban como lo hacían habitualmente. Y un montón de razones que no son médicas, sino sociales. Muchos estudios sugieren que el hecho de que una persona vulnerable, mayor, haya estado aislada y en confinamiento, infiere en su salud y evolución, afecta más que a personas jóvenes. Desgraciadamente, todos podemos ver casos así a nuestro alrededor. Son muertes que no son por**

COVID-19, pero están relacionadas con todo este proceso.'"] (2) (Emphasis mine.)

I want to make it clear that my afterthoughts are not about an either-or, but a both-as well. Life is not black and white. It consists of infinite shades of grey. And colours! Which I would like to face up to.

First and second wave in Germany

Since April 2021, the Robert Koch Institute, Berlin, has thankfully provided the EuroMoMo project in Copenhagen not only with data for Berlin, but for all of Germany. It is now possible to easily trace mortality since around early summer 2017 beyond the two regions of Hesse and Berlin.

Germany (29)
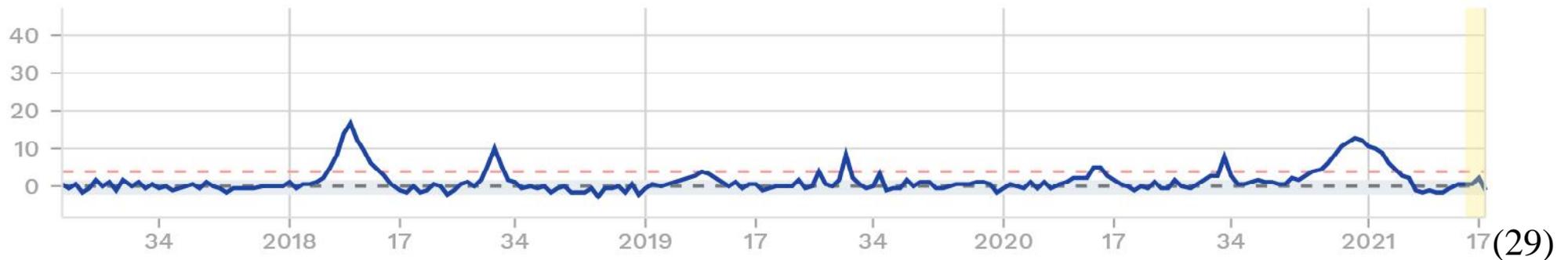
Thus, for influenza 2017/18 compared to COVID-19 in spring 2020, it is clear at a glance what was a little more laborious to extract from this table:

Table 2: Monthly deaths (all causes) in Germany at times of influenza and COVID-19[15]

	12/2016	01/2017	02/2017	03/2017	Sum 4 months
Flu 2016-17	84,339	96,033	90,649	82,934	353,955
	12/2017	01/2018	02/2018	03/2018	
Flu 2017/18	81,610	84,973	85,799	107,104	359,486
	01/2020	02/2020	03/2020	04/2020	
COVID-19	85,194	79,646	86,825	82,664	334,329

What also becomes clear, however, is the marked increase in deaths in Germany around the turn of 2020/21, which goes far beyond what was observed in the so-called "first wave" and - as in Spain in spring 2020 - is unusual for the time of year.

Spain

The peak values in Germany are still below those of the 2017/18 flu, but the flatter curve stretches

longer in time. In any case, the process is more severe than what happened at the same time in Sweden, which has always been unanimously condemned by the media.

Sweden
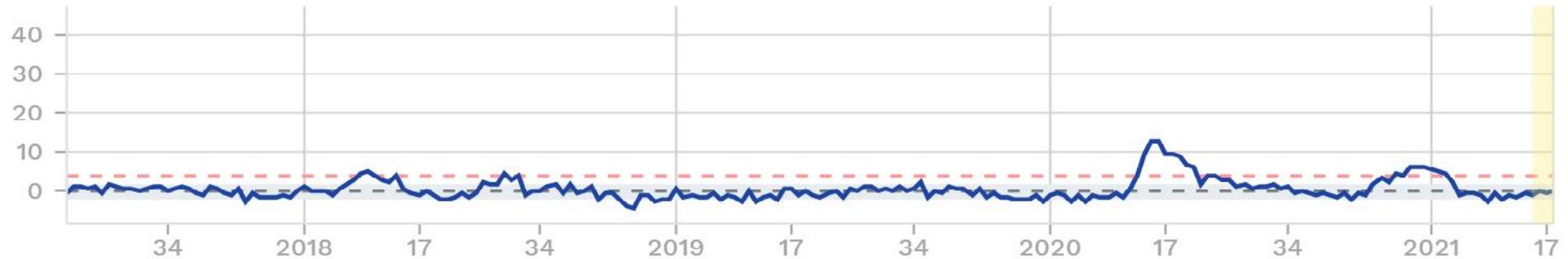
Switzerland
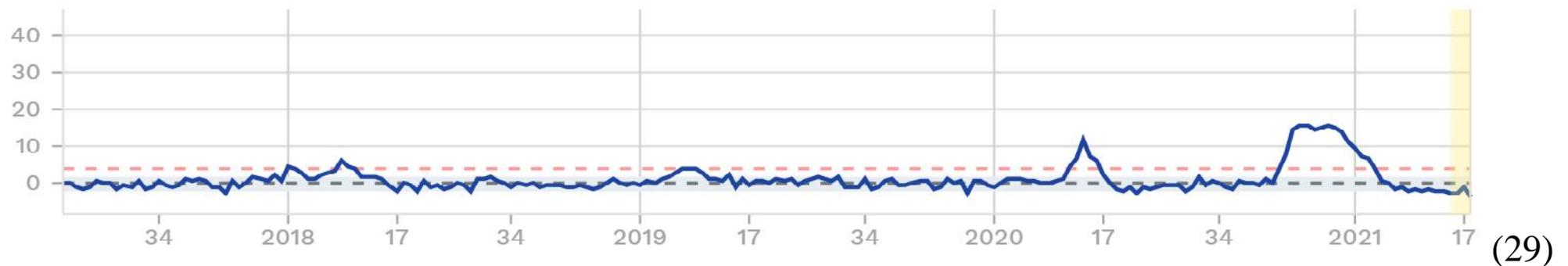
(29)

The benefit of lockdowns?

It is true that one cannot draw any conclusions about the benefit of lockdowns from excess mortality: Not only is Germany in a very different situation than Spain, which implemented a much tougher lockdown in spring 2020. Sweden, with its "only" recommendations for citizens and relatively few restrictions, is also in a better position than Switzerland with lockdown.

But not better than its neighbouring countries, but much worse:

Denmark
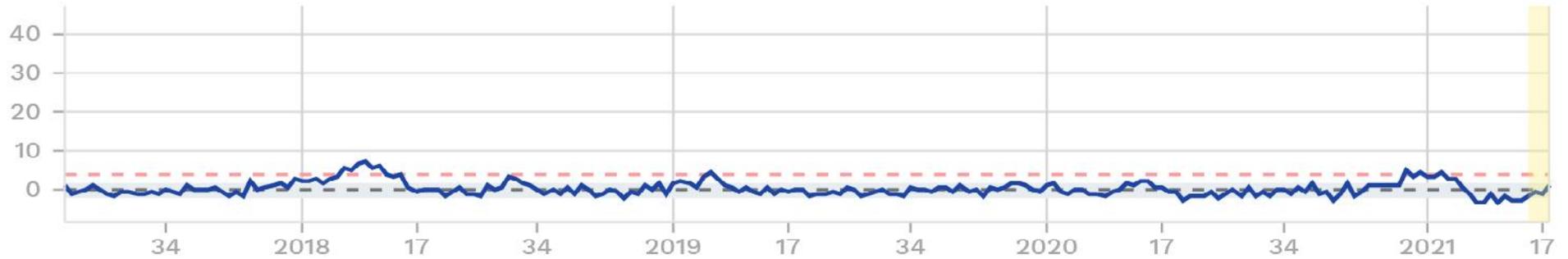
Finland

Norway
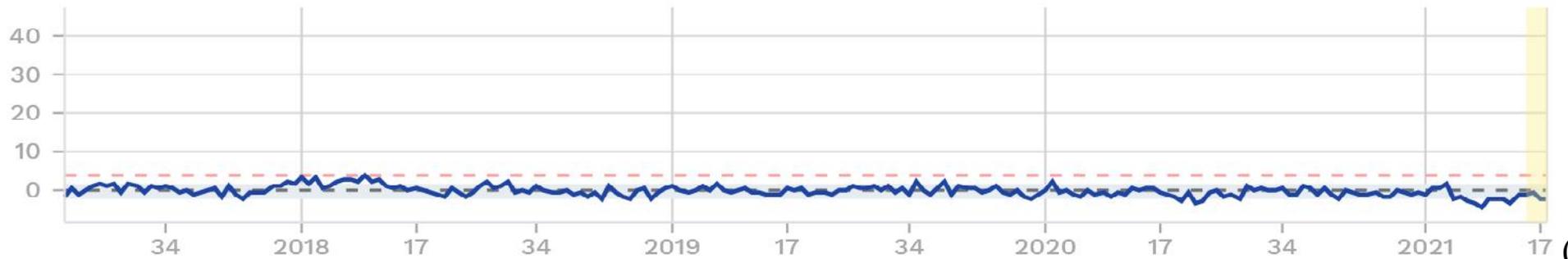
(29)

Europe of the two scenarios

Indeed, neighbouring countries are among the 9 out of 27 participating countries with no current excess mortality. 7 have never recorded excess mortality since the beginning of the pandemic. (29)

A comparative study of the measures taken in each case would be interesting in order to get closer to an answer as to the benefit of lockdowns than I can here.

"Desired shock effect"

March and April 2020 will forever be associated with the beginning of a large majority's fear of a new virus, and the beginning of a large minority's fear that it is a set-up.

Thrown back on myself and forced not to leave my little house for weeks during the extreme Spanish lockdown except for necessary shopping (28), I could not believe my eyes and ears: I was constantly exposed to the ubiquitous, frightening and completely detached, absolute figures of infections, ill people, deaths and images in the media that demonstrated the seriousness of the situation. Detached because without relation, without reference to the norm, to the background, to the context: I didn't know how many people were dying all the time anyway and from what. But now I was constantly informed about infection and death figures from every single Spanish autonomous region, from the largest cities, from European and non-European countries - *without any reference*.

Neither did I know how many people lived there and died all the time anyway, nor how high the share of "COVID deaths" was in the normal mortality.

Like many things, I distrusted a paper entitled "How we get COVID-19 under control" ("Wie wir COVID-19 unter Kontrolle kekommen"), which was "leaked" in the so-called "social media" as allegedly originating from the Federal Ministry of the Interior in April 2020, downloaded on 28.04.2020

(see also [Materials](#)): it looked too much like the pipe dream of a so-called "conspiracy theorist" and had too many stylistic weaknesses for me to trust it to a German ministry.

It still had the note "Confidential - Only for official use" ("VS-Nur für den Dienstgebrauch").

Today, exactly this [paper is publicly accessible on the page of the Federal Ministry of the Interior](#), only "VS-Nur für den Dienstgebrauch" has been removed. (Also available at the [Materials, downloaded on 16.05.2021](#).)

On pages 13 and 14 it said under "4. Conclusions for action and open communication" ("4. Schlussfolgerungen für Maßnahmen und offene Kommunikation"):

"4 a. Clarify worst case!

We have to get away from a communication that is centred on the case fatality rate. With a case fatality rate that sounds insignificant in percentage terms and that affects mainly the elderly, many then unconsciously and unacknowledgedly think to themselves: 'Well, this way we get rid of the old people who are dragging our economy down, there are already too many of us on earth anyway, and with a bit of luck I will inherit a bit earlier this way'. These mechanisms have certainly contributed to the trivialisation of the epidemic in the past.

In order to achieve the **desired shock effect**, the concrete effects of the spread of infection on human society must be made clear:

1) Many seriously ill people are brought to hospital by their relatives, but are turned away and die in agony at home, struggling to breathe. Suffocation or not getting enough air is a primal fear for every human being. Also the situation in which nothing can be done to help relatives whose lives

are in danger. The pictures from Italy are disturbing.

2) "Children will hardly suffer from the epidemic": False. **Children will easily become infected, even with curfew restrictions, e.g. with the neighbour's children. If they then infect their parents and one of them dies in agony at home and they feel they are to blame because, for example, they forgot to wash their hands after playing, it is the most terrible thing a child can ever experience.**

3) **Consequential damage**: Even though we only have reports of individual cases so far, they paint an alarming picture. **Even those who seem to be cured after a mild course can apparently experience relapses at any time, which then quite suddenly end fatally, through heart attack or lung failure**, because the virus has found its way unnoticed into the lungs or heart. These may be **isolated cases**, but they will constantly hover like a **sword of Damocles** over those who have once been infected. A much more common consequence is **fatigue and reduced lung capacity lasting months and probably years**, as has often been reported by SARS survivors and is now the case with COVID-19, although of course the duration cannot yet be estimated.

Furthermore, arguments should also be made historically, according to the mathematical formula: 2019 = 1919 + 1929

One only needs to visualise the figures presented above in terms of the **assumed mortality rate (more than 1% with optimal health care, i.e. well over 3% due to overload because of the spread of infection), compared to 2% for Spanish flu**, and in terms of the expected economic crisis if containment fails, then this formula will be obvious to everyone." (Emphasis mine.)

It read like the blueprint of the communication I experienced simultaneously in the German and Spanish media: no case fatality rate at all, which would have provided realistic information about the real danger. Instead, shocks without end and scaremongering, fed back into the media itself and thus amplified.

Somewhat earlier, around 20 March, a <u>"letter to my friends" from a supposed doctor at the Val d'Hebron Hospital, Barcelona</u>, made the rounds on Spanish social networks. It explained soberly and precisely, what would be in store for the Spanish health system because of the new virus' extremely high infectivity and its transmission even through asymptomatic people: triage, wartime medicine.

"Why is COVID-19 so enormously dangerous? What determines the danger of an infectious agent is the combination of 3 factors: the vector of transmission, morbidity and mortality. COVID-19 has a vector of transmission between 1.5 and 2.5, i.e. 3 times higher than influenza. This means that its **spread is geometric**: 1-2-4-8-16-32-64-128-256... but worst of all, unlike influenza and SARS, which was the last coronavirus epidemic in 2003, **this one also spreads during the two weeks of incubation**, before even having symptoms.

As for morbidity and mortality, it is as follows. One thing is clear: **WE ARE ALL GOING TO BE INFECTED BY COVID-19 in the next three months.**

Now, out of every 1000 people, 900 will have it asymptomatically, including children and young people. 100 will show symptoms. Of those 100, 80 will go through it like a really bad flu: dry cough, headache and muscle pain, i.e. two or three weeks at home sicker than a dog. Of the remaining 20, 15 will develop bilateral pneumonia with difficulty breathing, requiring hospital admission for bronchodilators, corticosteroids and oxygen. The remaining 5 will develop pulmonary fibrosis requiring immediate admission to the ICU with assisted breathing. Of those 5, 3 will die. And the two who are saved will have sequelae that will possibly require a lung transplant.

These are the figures currently used in the western scientific community, as the data in China were worse, but because their health system is not as prepared. Seen in this light, it doesn't seem so bad, does

it? The problem is that, unlike the flu, against which part of the population is vaccinated and which attacks progressively over 5 months of the year, **this infection is a wave (see Italy), so that in two to three months all the infections will occur**. So we already have the data to do the maths.

Of the 40 million Spaniards, only 4 million will have symptoms. Of these, 3,200,000 will suffer at home just like from a bad flu. 600,000 will need hospital admission with oxygen. And 200,000 will need ICU.

The problem is that in Spain, between the public and private health systems, there are only 200,000 hospital beds and 3,800 ICU beds. Do you see the problem? The real problem is not the disease itself, although it has a significant morbimortality, but that, due to its epidemiological characteristics, it comes in a wave infecting a whole population that has no previous immunity in a matter of 2-3 months, COLLAPSING THE HEALTH SYSTEM...!!!!

This means that when hospital beds and ICUs are full, **what is known as war medicine will have to be applied, i.e. when for every bed that becomes free there are 7 people waiting, the professionals will have to decide who to treat and who to send home, telling them that they will send them a doctor and an oxygen cylinder, which will never arrive because they will also have run out.**

This decision will be made on the basis of age and general condition. In other words, the youngest patients will be chosen, who will have a better chance of survival. This is without taking into account the rest of the serious and urgent pathologies: heart attacks, strokes, traffic accidents, etc. All this without beds and without ICU". (Emphasis mine.)

("¿Por que el COVID-19 es enormemente peligroso? Lo que determina el peligro de un agente infeccioso es la combinación de 3 factores: el vector de contagio, la morbilidad y la mortalidad. El COVID-19 tiene un vector de contagio entre 1,5 y 2,5, es decir, 3 veces superior a la gripe. Lo cual implica que su **propagación es geométrica**: 1-2-4-8-16-32-64-128-256... pero lo peor de todo es que, a

diferencia de la gripe y del SARS, que fue la última epidemia por coronavirus de 2003, **éste se contagia también durante las dos semanas de incubación**, antes de tener incluso síntomas.

En cuanto a la morbi-mortalidad, es la siguiente. Hay que tener una cosa clara: **TODOS VAMOS A INFECTARNOS POR EL COVID-19 en los próximos tres meses.**

Ahora bien, de cada 1000 personas, 900 lo pasarán asintomaticamente, incluidos niños y jóvenes. 100 mostrarán síntomas. De esos 100, 80 lo pasarán como una gripe muy jodida: tos seca, dolor de cabeza y muscular, es decir, dos o tres semanas en casa más malo que un perro. De 20 que quedan, 15 desarrollarán una neumonía bilateral con dificultad para respirar, que requerirá ingreso hospitalario para administrar broncodilatadores, corticoides y oxígeno. Los 5 restantes desarrollarán una fibrosis pulmonar que exigirá inmediato ingreso en la UCI con respiración asistida. De esos 5, 3 morirán. Y los dos que se salven presentarán secuelas que obligará posiblemente a trasplante de pulmón.

Estas son las cifras que se manejan actualmente en la comunidad científica occidental, ya que los datos en China han sido peores, pero porque su sanidad no está tan preparada. Visto así no parece tan grave, ¿verdad? El problema es que, a diferencia de la gripe, ante la cual una parte de la población se vacuna y además ataca progresivamente a lo largo de 5 meses al año, **está infección es una oleada (Ver Italia) De forma que en dos-tres meses se van a producir todos los contagios.** Así que ya tenemos los datos para hacer las cuentas.

De los 40 millones de españoles, solo 4 millones van a tener síntomas. De los que 3.200.000 la pasarán como una gripe mala en casa. 600.000 necesitarán ingreso hospitalario con oxígeno. Y 200.000 necesitarán UCI.

El problema es que en España existen, entre el sistema sanitario público y el privado, solo 200.000

camas hospitalarias y 3.800 camas de UCI. ¿Veis el problema? El auténtico problema no es la enfermedad en sí, a pesar de que tiene una morbimortalidad importante, sino que, debido a sus características epidemiologicas, viene en una oleada infectando a toda una población que no tiene inmunidad previa en cuestión de 2-3 meses, COLAPSANDO EL SISTEMA SANITARIO...!!!!

Eso significa que cuando las camas hospitalarias y las UCI estén llenas **habrá que aplicar lo que se conoce como Medicina de Guerra, es decir, cuando por cada cama que se quede libre haya 7 personas esperando, los profesionales tendrán que decidir, a quién atienden y a quién mandan a su casa diciéndoles que les mandarán un médico y una bombona de oxígeno, que no llegará nunca porque también se habrán acabado.**

Esa decisión se tomará en función de la edad y el estado general. Es decir, se escogerá a los más jóvenes, que tendrán más posibilidades de sobrevivir. Esto sin contar el resto de patologías graves y urgentes: infartos, ictus, accidentes de tráfico, etc. todo esto sin camas y sin UCI." (Emphasis mine.)

The hospital and the doctor exist; when interviewed, he stated that he had not written the letter himself, but had only forwarded it.

Paternalistic fearmongering and shock doctrine?

The justification for all this was the danger perceived by the decision-makers then and now. My paper tries to contribute to answering the question whether the danger was and is realistically assessed.

Here and now I say that deliberately planned fearmongering by the government to get the masses to obey orders is profoundly contrary to a democratic polity. It is a prime example of deliberate manipulation.

The severity of the feedback in the communication media has already reached the level of a pathogen in its own right, especially, but not only, when I think of the psychological effects on the "risk groups" and on children.

I have found out through press reports from past years that, for example, the health system in northern Italy and some areas of Spain is already on the verge of collapse in normal flu waves. In many Third World countries, which have been in the headlines lately, it is non-existent for the mass of the population anyway.

Images from these environments were and are the means of choice to create compliant behaviour.

As an aside: I have no idea how funerals **normally** go in northern Italy, New York or Brazilian, Indian or Nepalese cities during times of flu.

Hopeless questions

With questions like:

"How many people were tested?"
"How were they selected?"
"Was a representative cross-section of the population tested to gain knowledge about the real spread of the virus?"
"What is the proportion of those tested in the total population?"
"What is the proportion of positive test results?"
"What is the proportion of those tested positive who become ill?"
"What is the proportion of those become ill who require hospital treatment?"

"What is the proportion of those hospitalised who require intensive care?"
"What is the proportion of those receiving intensive care who die?"
"So what is the proportion of deaths in the number of people infected or ill in relation to other infectious diseases, e.g. influenza?"

I quickly stopped bothering because of both opaque testing strategies and opaque communication of results focusing on absolute numbers without any reference.

Furthermore: According to the Robert Koch Institute, the corresponding data for influenza are only *estimates*, as there are no corresponding test results: Whoever goes to the doctor gets sick with flu statistically. The lethality of influenza is estimated on this basis, not on the basis of those infected or actually ill, who are not tested either, not to mention those who are asymptomatic. Comparison at this level is difficult or impossible.

Accordingly, I know of comparisons between the lethality of influenza and that of the new virus which are of only limited use. In the official communication of danger, the small difference was compensated for by emphasising the extraordinarily easy transmission of the new virus, even by asyptomatics, which is also a regular theme with new variants: The danger is not so much the high case fatality rate, which should not be talked about anyway, but rather the overloading of the health system due to an unusually large number of people being affected in an unusually short time, as seems to be shown by the excess mortality in the first wave in Spain. [See the statements of epidemiologist Amparo Larrauri at the beginning of this chapter! (2)]

"Corona deaths" and excess mortality

In *Germany*, during the period covered by my study, many more "corona deaths" were reported than the mortality rate allows. What does this mean logically?

The "corona deaths" are deaths with a positive test result, but did not die of corona. It is also conceivable that all the measures taken have reduced the overall mortality rate so much that the "corona deaths" are not statistically significant.

However, all this has prevented neither the media nor politicians from politically instrumentalising these deaths with positive test results.

In Spain, the recording of the "corona deaths" lagged behind the excess mortality. Amparo Larrauri, epidemiologist in charge of the mortality monitoring team and scientist at the National Centre for Epidemiology, whom I quoted above, has explained this perfectly. (5)

What is reality?

I was deeply worried and frightened, which was triggered by the initially puzzling reporting. At first, I did not believe it to have the intention of scaring. I thought it was stupidity and unconscious feedback from supposed sensationalist news. Fear was added by reports of an extremely high infectivity of the new virus. So in my own personal situation an urgent need developed **for me and my going on living** amidst the fear created around me to gain information about the real significance of what was happening. It was "*for me*", because this was a kind of "therapy" against fear, anxiety and disorientation. It was an attempt to defend *myself* against the rigidity of fear, whether because of the virus or because of something else.

The most feasible thing seemed to me to be to inform myself about the development of the death figures,

because - according to my thinking - a pandemic would have to be reflected there without a doubt.

If you put what is happening at the moment in relation to "normal", everyday dying, which is blanked out in our culture, the omnipresence of which we are hardly aware of and about the extent of which we usually know nothing, you can get closer to reality than through the absolute numbers and shocking images and ideas provided in abundance and with attention to detail.

So I started to deal with a very narrow area, fortunately accessible to me in my isolated situation and to all of us, that of so-called excess mortality in Spain and Germany in comparison with each other, in the temporal comparison of the present epidemic with past epidemics, and against the background of the general mortality of the two societies. I have chosen both countries because of my personal closeness to them as home and adopted country and because of the strong contrast in the course of the pandemic, of which most people with only a national perspective are not aware. Everywhere the perception prevails: What is happening here is happening everywhere. This is not even true within the same state: the course of the disease varies greatly from region to region.

Excess mortality is particularly suitable for getting closer to reality, since the question of how many people have died in a precisely defined region within a precisely defined period of time - regardless of the cause - seems to be quite uncontroversial and relatively easy to answer statistically. The authorities that register births do so just as reliably for deaths.

The idea was that the officially recorded and presented course of mortality - placed in the framework of the deaths that occur anyway and usually - could allow conclusions to be drawn about the real significance of the pandemic events. I have tried to portray my conclusions above, at the beginning of these afterthoughts.

I have talked to a few people about my findings. Some were quick to see me as a "conspiracy theorist"

just because I asked questions and did irreverent research on the un-topic of dying. Some agreed, some didn't like it because I found out that COVID is something extraordinary at certain times in certain places - and because lots of open questions remain. Most have said nothing.
In the meantime, I have not been able to find any serious errors and none have been brought to my attention. So in the last few days I have set about publishing this on my internet site.

In view of everything that is happening, I wanted to do what I can to support those who want to deal with the situation as sensibly as possible. Unfortunately, there are not that many.
I, for one, know that I know and can know only a little. I don't believe anything, I need evidence, and I have looked for and found some, for the little I can know. And anyone who doesn't believe me can check it out - and please let me know of any errors they find.

The "rest" of the world

Is it a coincidence that the African country that was most recently decolonised and has a strong and still influential white minority seems to be the most affected by the pandemic?

Or does it rather indicate that in the majority of African countries either no or little data are collected or that these data are irrelevant in view of other health (malaria, tuberculosis and other infectious diseases) and political problems and the chronic health undersupply of the population?

The events are multifactorial

The course of infections, illnesses and deaths appears to be dependent on
- demographics / age structure and the nature of social institutions: The majority of deaths in the severely

affected European countries occurred in homes for the elderly, mostly privatised in Spain, with obviously inadequate infection precautions and precarious employment conditions that may even force people to work in several homes at the same time, with all that this implies for the incidence of infection;
- the general health of the population;
- population density;
- possibly air quality;
- possibly the climate;
- the state of the health system: the supply of doctors, nurses, beds, intensive care beds. Long-, medium- and short-term bad decisions regarding health care are not addressed, neither at national nor European level, not even by the socialist Spanish government vis-à-vis its conservative predecessors, who - as in all southern European countries - have imposed drastic austerity measures with the corresponding effects on care, in addition to privatisation, as a consequence of the financial crisis.

Cui bono?

Conservative German members of the Parliament (Bundestag), calling themselves christian, have enriched themselves on the masks that have been declared compulsory. And who on the vaccines, beyond the manufacturers and shareholders?

In her 2007 book *The Shock Doctrine*, Naomi Klein writes about former Secretary of Defence of the United States of America, Donald Rumsfeld:

(The pharmaceutical company) "Gilead, for its part, sees epidemics as a growth market, and it has an aggressive marketing campaign to encourage businesses and individuals to stockpile Tamiflu, just in case. Before he reentered government, Rumsfeld was so convinced that he was on to a hot new industry

that he helped found several private investment funds specializing in biotechnology and pharmaceuticals. These companies are banking on an apocalyptic future of rampant disease, one in which governments are forced to buy, at top dollar, whatever lifesaving products the private sector has under patent." (30)

One of Gilead's three product groups is drugs and vaccines against viral diseases. Pfizer and Gilead work together on the production of remdesivir. I have no information about the ownership, i.e. which of the investment funds have invested in which companies, and of course even less knowledge about the institutions and people who have invested their money in these investment funds.

The famous revolving doors between business and politics are certainly also important when it comes to pharmaceutical products, not just masks.

Attempt to view in perspective the health hazard posed by the COVID-19 pandemic:
Mortality between February and the end of May 2020 in Spain
and January and the end of April in Germany
compared to the general death rate in both countries

Notes

1: "The National Center of Epidemiology clarifies to eldiario.es that, indeed, 'today we have made an important update resulting from the work we have been doing with the Ministry of Justice'. The objective is to 'recover those deaths that had not entered the MoMo System due to delays in notification during the previous three months'. (...) The Instituto de Salud Carlos III provides in its graphs the estimated average time in delay of notifications, and for these days in which the 12,032 deaths have been added, the delay is 35 days. (...)
The minimum personnel services due to the state of alarm and the increase in deaths due to the coronavirus led to a situation of collapse in several civil registries and morgues, especially the one in Barcelona and the morgue of the City of Justice of the Catalan capital. In a report from early April, the time of the peak, the Generalitat's (Catalan government's, R.W.) sub-directorate general for planning the administration of Justice revealed that the death section of the Barcelona civil registry had not been carrying out death registrations since March 17 as its minimum services are focused on issuing family books and burial licenses due to the 'high workload.'"
("Desde el Centro Nacional de Epidemiología aclaran a eldiario.es que, efectivamente, 'hoy hemos hecho una actualización importante resultante del trabajo que venimos realizando con el Ministerio de Justicia'. El objetivo es 'recuperar aquellas defunciones que no habían entrado en el Sistema MoMo por retraso en la notificación durante los tres meses anteriores'. (…) El Instituto de Salud Carlos III aporta en sus

gráficas el tiempo medio estimado en retraso de notificaciones, y para estos días en en los que se han sumado las 12.032 muertes, el retraso es de 35 días. (…)
Los servicios mínimos de personal debido al estado de alarma y el aumento de muertes por el coronavirus llevaron a una situación de colapso en varios registros civiles y depósitos de cadáveres, que sufrió especialmente el de Barcelona y el depósito de cadáveres de la Ciudad de la Justicia de la capital catalana. En un informe de principios de abril, momento del pico, la subdirección general de planificación de la administración de Justicia de la Generalitat revelaba que la sección de defunciones del registro civil de Barcelona no estaba practicando inscripciones de defunciones desde el 17 de marzo ya que sus servicios mínimos se centran en expedir libros de familia y licencias de enterramiento debido a la 'elevada carga de trabajo'."
https://m.eldiario.es/sociedad/MoMo-registro-muertes_0_1031697065.html?_ga=2.195763883.607369215.1590683111-795171950.1590683111, 27/05/2020, last accessed 05/06/2020.

2: "The excess mortality observed, according to Amparo Larrauri, epidemiologist and head of the MoMo team and scientist at the National Epidemiology Centre, 'May be due to cases with confirmed COVID-19, to cases with unconfirmed COVID-19 that surveillance systems do not identify, and to the pandemic indirectly. The latter is very important. **We have experienced a change in the social and health structure, and this has meant that many people with underlying pathologies have not gone to the doctor for a multitude of reasons, such as fear of contagion or that their consultations did not work as they usually did. And a host of reasons that are not medical, but social. Many studies suggest that the fact that a vulnerable, older person has been isolated and in confinement affects their health and evolution more than younger people. Unfortunately, we can all see such cases around us. These are deaths that are not COVID-19, but are related to this whole process.'"**
(Emphasis by R.W.)

("El exceso de mortalidad constatado, según Amparo Larrauri, epidemióloga y responsable del equipo MoMo y científica del Centro Nacional de Epidemiología, 'Puede deberse a casos con COVID-19 confirmada, a casos con COVID-19 sin confirmar y que los sistemas de vigilancia no identifican, y a la pandemia de manera indirecta. Esto último es muy importante. **Hemos vivido un cambio de estructura social y sanitaria, y eso ha provocado que muchas personas con patologías de base no se hayan acercado al médico por multitud de razones, como que temían el contagio o que sus consultas no funcionaban como lo hacían habitualmente. Y un montón de razones que no son médicas, sino sociales. Muchos estudios sugieren que el hecho de que una persona vulnerable, mayor, haya estado aislada y en confinamiento, infiere en su salud y evolución, afecta más que a personas jóvenes. Desgraciadamente, todos podemos ver casos así a nuestro alrededor. Son muertes que no son por COVID-19, pero están relacionadas con todo este proceso.'**") (Emphasis by R.W.) https://www.eldiario.es/sociedad/llegaremos-cuantas-muertes-directamente-COVID-19_0_1033797562.html?_ga=2.257052940.607369215.1590683111-795171950.1590683111, 02/06/2020, last accessed 05/06/2020.

The diagrams are taken from the European Mortality Monitoring Bulletin https://www.euromomo.eu/graphs-and-maps/, week 20/2020, last accessed 15/05/2020.

3: Instituto Nacional de Estadística (INE), https://www.ine.es/consul/serie.do?s=MNP89585&c=2&nult=50 , last accessed 30/04/2020.

4: INE data on monthly deaths in Spain from 01/2019 until 06/2019 are provisional: https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736177008&idp=1254735573002&menu=resultados#!tabs-1254736195546 , last accessed 22/04/2020, published 11/12/2019. The final data for the first half of 2020 will be published in December 2020.

5: https://momo.isciii.es/public/momo/dashboard/momo_dashboard.html, updated and corrected daily. The shaded area is the normal range, as in EuroMoMo, https://www.euromomo.eu/, determined from long-term values, and only when it is exceeded does one speak of excess mortality.

"What exactly are we talking about when we say that there is an 'excess' in Spain of almost 43,000 deaths during the months of the pandemic, if the Health Ministry reports 28,000? These 43,000 deaths are the results of the daily all-cause mortality surveillance of the MoMo system, and mean the difference between the deaths we observe for a period, and the expected mortality from the historical series in Spain over the last ten years. The latter, the expected mortality, is derived from data from the National Institute of Statistics (INE), with a mathematical model of moving averages adjusted for trend and seasonality. The daily observed mortality comes from data from the Ministry of Justice from the computerised civil registers of almost 4,000 Spanish municipalities, including all the provincial capitals, which correspond to 93% of the Spanish population. This is a very important amount of information. Using the MoMo system, we have estimated an excess of deaths from all causes during the first pandemic wave of COVID-19. It is very logical to assume that part of the excess mortality corresponds directly to COVID-19. It is also logical to think that the actual deaths due to COVID-19 have been higher than the number provided by the Ministry of Health, since these are official figures from the autonomous communities that cannot cover the totality, only the microbiologically confirmed deaths. And they are all within these excesses estimated by the MoMo. This is neither abnormal nor contradictory: they are studies that do not contradict each other but complement each other in order to establish the true impact of the pandemic. The abnormal thing would be for them to be the same. Health provides the confirmed deaths by COVID-19; MoMo provides the deaths from all causes, many of them attributable to COVID-19. And it will still be some time before we definitively consolidate the true mortality of these months".

Amparo Larrauri, epidemiologist and head of the MoMo team and scientist at the National

Epidemiology Centre,
https://www.eldiario.es/sociedad/llegaremos-cuantas-muertes-directamente-COVID-19_0_1033797562.html?_ga=2.257052940.607369215.1590683111-795171950.1590683111,
02/06/2020, last accessed 05/06/2020.

(„¿De qué hablamos exactamente cuando decimos que hay un 'exceso' en España de casi 43.000 muertes durante los meses de la pandemia, si Sanidad reporta 28.000? Esas 43.000 muertes son los resultados de la vigilancia de la mortalidad diaria por todas las causas del sistema MoMo, y significan la diferencia entre las defunciones que observamos para un periodo, y la mortalidad esperada a partir de las series históricas en España de los últimos diez años. A esta última, la mortalidad esperada, llegamos a partir de datos del Instituto Nacional de Estadística (INE), con un modelo matemático de medias móviles que se ajustan por la tendencia y por la estacionalidad. La mortalidad observada diaria procede de datos del Ministerio de Justicia a partir de los registros civiles informatizados de casi 4.000 municipios españoles, entre ellos todas las capitales de provincias, que corresponden al 93% de la población española. Una cantidad de información muy importante.

Mediante el sistema MoMo hemos estimado un exceso de las muertes por todas las causas durante la primera ola pandémica de COVID-19. Es muy lógico suponer que parte de la mortalidad en exceso corresponde directamente a la COVID-19. También es lógico pensar que las defunciones reales por COVID-19 han sido un número mayor del que proporciona el Ministerio de Sanidad, puesto que son cifras oficiales procedentes de las comunidades autónomas que no pueden cubrir la totalidad, solo las defunciones confirmadas microbiológicamente. Y todas están dentro de estos excesos estimados por los MoMo. No es nada anormal, ni contradictorio: son estudios que no se contraponen sino que se complementan para establecer cuál ha sido el verdadero impacto de la pandemia. Lo anormal sería que fueran iguales. Sanidad da las defunciones confirmadas por COVID-19; el MoMo, las defunciones por todas las causas, muchas de ellas atribuibles a COVID-19. Y aún tendrá que pasar un tiempo para que

consolidemos definitivamente la verdadera mortalidad de estos meses."
Amparo Larrauri, epidemióloga y responsable del equipo MoMo y científica del Centro Nacional de Epidemiología.)

6: https://momo.isciii.es/public/momo/dashboard/momo_dashboard.html#datos, last accessed 04/06/2020.

7: Accessed 03/04., 01/05., 27/05., 02/06. and 04/06/2020.

8: https://www.euromomo.eu/graphs-and-maps/, updated every Thursday; these are the charts for Spain and Germany respectively from the Bulletin of week 20/2020, accessed 15/05/2020.

9: A maximum of 2,466 deaths occurred on 31/03/2020. In comparison, in 2018, the last year for which the Instituto Nacional de Estadística provides definitive figures (https://www.ine.es/dyngs/INEbase /es/operacion.htm?c=Estadistica_C&cid=1254736177008&menu=ultiDatos&idp=1254735573002), an average of 1,172 people died every day.
I was unable to establish the daily maxima during the past flu epidemics, so I concentrate on the more easily comparable monthly values, especially since the contemplation of temporally as well as geographically very small sections tends to focus on extreme values.

10: Instituto Nacional de Estadística, https://www.ine.es/dynt3/inebase/index.htm?padre=1132&capsel=1134 , accessed 22/04/2020.

11: Centro Nacional de Epidemiología, Monitorización de la Mortalidad diaria (MoMo), https://momo.isciii.es/public/momo/dashboard/momo_dashboard.html, accessed 04/06/2020.

12: https://momo.isciii.es/public/momo/dashboard/momo_dashboard.html#nacional, accessed

04/06/2020.

13: Own calculation.

14: Excess mortality is, according to Amparo Larrauri, epidemiologist and head of the MoMo team and scientist at the National Epidemiology Centre, "... the difference between the deaths we observe for a period, and the expected mortality from the historical series in Spain over the last ten years. The latter, the expected mortality, is derived from data from the National Institute of Statistics (INE), with a mathematical model of moving averages adjusted for trend and seasonality." https://www.eldiario.es/sociedad/llegaremos-cuantas-muertes-directamente-COVID-19_0_1033797562.html?_ga=2.257052940.607369215.1590683111-795171950.1590683111, 02/06/2020, accessed 05/06/2020.

15: https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Sterbefaelle-Lebenserwartung/Tabellen/sonderauswertung-sterbefaelle.html?nn=209016, accessed and downloaded 05/06/2020.

16: "When looking at the course of the year in the death statistics, the typical fluctuations during the flu season from around mid-December to mid-April should be noted. This becomes clear when looking at the figures from previous years: in March 2019, for example, around 86,400 people died; in March 2018, i.e. in a year when the flu epidemic was particularly severe, the figure was 107,100. **Even without a Corona pandemic, the death figures can therefore fluctuate greatly during the typical flu season. These fluctuations particularly affect the number of deaths in the age group 65 and older. According to the preliminary death figures, the impact of the flu wave in 2020 was very low compared to previous years. In January 2020, about 85 200 people died according to the preliminary count. In February 2020, there were 79 600 deaths. Also in March 2020, with a total of**

at least 86 800 deaths, no noticeable increase compared to previous years is discernible when viewed on a month-by-month basis. In April, however, with at least 82 600 cases, the number of deaths was clearly above the average of previous years.

Looking at the trend by calendar week, there have been increased death case numbers since the last week of March (23 to 29 March) compared to the 2016 to 2019 average. This upward deviation was greatest in the 15th calendar week (6 to 12 April). From the 16th calendar week (13 to 19 April) onwards, the number of deaths fell again significantly. In the 19th calendar week (4 to 10 May), according to the preliminary count, the number of deaths was no longer above the average of previous years. The findings on temporary excess mortality, when looking at the absolute numbers, are approximately in line with the data on confirmed COVID-19 deaths reported to the Robert Koch Institute (RKI)." (Emphasis by R.W.)

(„Bei der Betrachtung des Jahresverlaufes in der Sterbefallstatistik sind die typischen Schwankungen während der Grippezeit von ungefähr Mitte Dezember bis Mitte April zu beachten. Dies wird beim Blick auf die Zahlen aus den Vorjahren deutlich: Im März 2019 starben beispielsweise etwa 86.400 Menschen, im März 2018, also in einem Jahr, als die Grippewelle besonders heftig ausfiel, waren es 107.100. **Auch ohne Corona-Pandemie können die Sterbefallzahlen demnach in der typischen Grippezeit stark schwanken. Von diesen Schwankungen sind insbesondere die Sterbefallzahlen in der Altersgruppe ab 65 Jahren betroffen.**

Die Auswirkungen der Grippewelle im Jahr 2020 waren den vorläufigen Sterbefallzahlen zufolge im Vergleich zu den Vorjahren sehr gering ausgeprägt. Im Januar 2020 starben nach der vorläufigen Auszählung etwa 85 200 Menschen. Im Februar 2020 waren es 79 600 Personen. Auch im März 2020 mit insgesamt mindestens 86 800 Sterbefällen ist bei einer monatsweisen Betrachtung kein auffälliger Anstieg der Sterbefallzahlen im Vergleich zu den Vorjahren erkennbar. Im April lag die Zahl der Gestorbenen allerdings mit mindestens 82 600 Fällen

deutlich über dem Durchschnitt der Vorjahre.

Betrachtet man die Entwicklung nach Kalenderwochen, dann haben sich seit der letzten Märzwoche (23. bis 29. März) erhöhte Sterbefallzahlen im Vergleich zum Durchschnitt der Jahre 2016 bis 2019 gezeigt. Diese Abweichung nach oben war in der 15. Kalenderwoche (6. bis 12. April) am größten. Ab der 16. Kalenderwoche (13. bis 19. April) sind die Sterbefallzahlen wieder deutlich gefallen. In der 19. Kalenderwoche (4. bis 10. Mai) lagen die Sterbefallzahlen nach der vorläufigen Auszählung dann nicht mehr über dem Durchschnitt der Vorjahre. Die Befunde zu einer zeitweisen Übersterblichkeit decken sich bei Betrachtung der absoluten Zahlen annhähernd mit den Daten zu bestätigten COVID-19-Todesfällen, die beim Robert Koch-Institut (RKI) gemeldet werden."

(Emphasis by R.W.)

(https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Sterbefaelle-Lebenserwartung/sterbefallzahlen.html, accessed 05/06/2020)

17: https://www.destatis.de/DE/Presse/Pressemitteilungen/2020/06/PD20_203_12621.html?nn=209016, accessed 06/05/2020.

18: Instituto Nacional de Estadística: https://www.ine.es/, accessed 29/04/2020. https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736177008&menu=ultiDatos&idp=1254735573002

19: https://covid19.isciii.es/, accessed 03/05/2020

20: https://www.ine.es/jaxiT3/Tabla.htm?t=14819

21: Regarding hospital germ infections in Spain, *Informe global de España, Resumen, Análisis EPINE-EPPS 2017 (313 hospitales y 61.673 pacientes)*, 9 Noviembre 2017, concludes that between 7 and 9% of

patients become infected within the hospital. (http://hws.vhebron.net/epine/Global/EPINE-EPPS%202017%20Informe%20Global%20de%20Espa%C3%B1a%20Resumen.pdf) (Note 08/05/2021: The document can no longer be accessed. It can be viewed under "Materials" and the title *EPINE-EPPS 2017 Informe Global de España Resumen.pdf*.) The number of resulting deaths is not shown. **"According to the experts gathered at the conference, between 5% and 15% of patients admitted to hospital end up suffering from a nosocomial infection. The World Health Organisation (WHO) reminds that in Europe there are 4.5 million HCAIs (Healthcare Associated Infections, R.W.) per year, a figure that translates into 37,000 deaths and 16 million additional hospital stays."** (Emphasis mine.)

(**"Según han puesto de manifiesto los expertos reunidos en la jornada, entre un 5% y un 15% de los pacientes ingresados en un hospital acaba padeciendo una infección nosocomial. La Organización Mundial de la Salud (OMS) recuerda que en Europa se producen 4,5 millones de IRAS (Infecciones Relacionadas con la Asistencia Sanitaria, R.W.) al año, cifra que se traduce en 37.000 muertes y 16 millones de estancias hospitalarias adicionales."** (Emphasis mine.) (*Las infecciones nosocomiales más frecuentes en España son urinarias, respiratorias y del lecho quirúrgico*, Article dated 28/04/2016 in https://www.immedicohospitalario.es/noticia/8349/las-infecciones-nosocomiales-mas-frecuentes-en-espana-son-urinarias-respiratorias-y-del-lecho-quirurgico).

22: Here I take data without own verification from Ellis Huber, *The Virus, People and Life. The Corona Pandemic and Everyday Health Care*, (*Das Virus, die Menschen und das Leben. Die Corona Pandemie und die alltägliche Gesundheitsversorgung*, https://www.praeventologe.de/hauptbeitraege-nicht-loeschen/1380-informationen-zu-corona, last accessed 24/04/2020, frequently updated, .
I have asked Mr Huber, former chairman of the Berlin Medical Association and current chairman of the Association of Preventologists, for sources regarding the "background"-mortality of the current pandemic in Germany, but he has not answered me and has not expanded his internet presentation

accordingly, which I regret. (Note 08/05/2021: Now there is a detailed list of sources at the site mentioned). Because of the relatively clear situation in Germany, which does not go beyond the norm, and in order to save time, I have refrained from checking the factual assertions he has made.

23: https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Fallzahlen.html, last accessed 03/05/2020.

24: https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Bevoelkerungsstand/_inhalt.html, last accessed 03/05/2020.

25: SARS-CoV-2 Factsheet on Coronavirus-Desease-2019 [Steckbrief zur Coronavirus-Krankheit-2019 (COVID-19)], Status: 29/5/2020, https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Steckbrief.html, last accessed 11/06/2020.

"7. incubation period and serial interval
The incubation period indicates the time from infection to the onset of the disease. It is on average (median) 5-6 days (range 1 to 14 days) (54, 137)."
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Steckbrief.html#doc13776792bodyText7

("7. Inkubationszeit und serielles Intervall
Die Inkubationszeit gibt die Zeit von der Ansteckung bis zum Beginn der Erkrankung an. Sie liegt im Mittel (Median) bei 5–6 Tagen (Spannweite 1 bis 14 Tage) (54, 137)."
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Steckbrief.html#doc13776792bodyText7)

"12. Time from onset of disease to pneumonia

In one publication (Chinese case series [n = 1,099]), this time range was four days [IQR]: 2-7 days) (23)."

"13. Time from onset to hospitalisation": 4 - 8 days.

"14. time from onset to acute respiratory distress syndrome (ARDS)": 8-9 days

"15. time from onset of illness to ICU" (intensive care unit): 5 - 10 days

"16. Time from hospitalisation to ICU

In a Chinese case series (see 13.), this time range was on average (median) one day (IQR: 0-3 days) (130)."

"22. Proportion of deceased among ICU patients".

(...) On median, deceased patients were hospitalised for nine days (49)."

("12. Zeit von Erkrankungsbeginn bis Pneumonie

In einer Veröffentlichung (chinesische Fallserie [n = 1.099]) betrug diese Zeitspanne vier Tage [IQR]: 2–7 Tage) (23)."

"13. Zeit von Erkrankungsbeginn bis Hospitalisierung": 4 - 8 Tage"

"14. Zeit von Erkrankungsbeginn bis zum Akuten Lungenversagen (Acute Respiratory Distress Syndrome, ARDS)": 8 - 9 Tage

"15. Zeit von Erkrankungsbeginn bis ITS" (Intensivtherapiestation): 5 – 10 Tage

"16. Zeit von Hospitalisierung bis ITS

In einer chinesischen Fallserie (siehe 13.) betrug diese Zeitspanne im Mittel (Median) einen Tag (IQR: 0–3 Tage) (130)."

"22. Anteil Verstorbener unter den ITS-Patienten

(…) Im Median waren die Verstorbenen Patienten neun Tage hospitalisiert (49).")

My calculation of the **period from infection to death**:

Incubation min 1 - max 14 days
Onset of illness to hospitalisation min 4 - max 8 days
Onset of illness to ICU min 5 - max 10 days
Hospitalisation to death average 9 days
Period from infection to death: **MINIMUM: 14 days MAXIMUM: 31 days**

26: Tagesspiegel, 29/05/2020: "'Without the test, this would have been detected 'only a month' later, 'when the deaths would have accumulated as in Italy, Spain and Great Britain'. That's how long it takes from infection to death in intensive care, the virologist continued. 'And that's the month we - and by that I mean my lab - put in as a lead for Germany.'"
("'Ohne den Test sei dies 'erst einen Monat' später festgestellt worden, 'wenn sich wie in Italien, Spanien und Großbritannien die Toten gehäuft hätten'. So lange dauere es von der Infektion bis zum Tod auf der Intensivstation, so der Virologe weiter. 'Und diesen Monat haben wir – und damit meine ich mein Labor - für Deutschland als Vorsprung eingespielt.'")
https://m.tagesspiegel.de/wissen/mein-labor-hat-deutschland-vorsprung-eingespielt-virologe-drosten-reklamiert-rettung-von-bis-zu-100-000-leben-fuer-sein-team/25871954.html??, last accessed 11/06/2020.

27: Robert-Koch-Institut, Estimate of the current development of the SARS-CoV-2 epidemic in Germany (Schätzung der aktuellen Entwicklung der SARS-CoV-2-Epidemie in Deutschland) – Nowcasting, Epidemiologisches Bulletin 17-2020, 23. April 2020, p. 14. https://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2020/Ausgaben/17_20.pdf?__blob=publicationFilehttps://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2020/Ausgaben/17_20.pdf?__blob=publicationFile, downloaded 10/06/2020.

28: I am not complaining, because I was privileged: Secure income, health, little house with a garden, pleasant climate...... But I was constantly aware of what this means for people who live in a big city,

possibly with children, in a floor flat and have to worry about their income.

29: https://euromomo.eu/graphs-and-maps/, accessed and downloaded 16/05/2021.

30: Naomi Klein, *The Shock Doctrine: The Rise of Disaster Capitalism,* Metropolitan Books, Henry Holt and Company, 2007, p. 290-291.

Attempt to view in perspective the health hazard posed by the COVID-19 pandemic:
Mortality between February and the end of May 2020 in Spain
and January and the end of April in Germany
compared to the general death rate in both countries

Materials

Diagrams of the [European Mortality Monitoring, Statens Serum Institut, Copenhagen](#):

Week 20/2020, downloaded on 15/05/2020, format .pdf

Week 19/2021, downloaded on 16/05/2021, format .pdf

Week 19/2021, downloaded on 16/05/2021, format .png

Diagrams of the [mortality monitoring of the Instituto Carlos III, Madrid](#):

Mortality from 1 december 2019 until 30 april 2020, including the period of excess mortality 17 March until 30 April 2020, downloaded on 01/05/2020, format .pdf

Data sheets of the [mortality monitoring of the Instituto Carlos III, Madrid](#):

Mortality February 2020 until May 2020, inclusive, downloaded on 02/06/2020, format .ods

Mortality 15/05/2018 to 01/06/2020, downloaded on 02/06/2020, format .csv

Nosocomial infections in Spain:

EPINE-EPPS 2017 Informe Global de España Resumen.pdf

Data sheets of the <u>Federal Statistical Office - Statistisches Bundesamt, Wiesbaden, Germany</u>:

Special survey deaths (Sonderauswertung Sterbefälle) 2016-2020, downloaded on 05/06/2020, format .ods

Special survey deaths (Sonderauswertung Sterbefälle) 2016-2021, downloaded on 27/01/2021, format .pdf

Materials of the <u>Robert-Koch-Institut, Berlin:</u>

Epidemiologisches Bulletin 17/2020, 23. April 2020, downloaded on 10/06/2020, format .pdf

Materials of the Federal Ministry of the Interior - <u>Bundesministeriums des Inneren, Berlin:</u>

Wie wir COVID-19 unter Kontrolle bekommen (How to get COVID-19 under control), anonymous, without date, leaked during April 2020, downloaded on 28/04/2020

Wie wir COVID-19 unter Kontrolle bekommen (How to get COVID-19 under control), anonymous,