Cov-19, What determines how it will affect you, and What is the True Death Rate?

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As of today, March 31, the death rate in the U.S. overall from Cov-19 is 2,860 deaths/163,539 = 1.7%. However, this is not accurate because of widespread under-testing and because of asymptomatic cases. The newest estimate based on statistical modeling is now 0.15%, about the same as seasonal flu. See the full article by clicking on the link for more details and references.
https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html
According to government estimates, the virus is in the rapid infectious state with acceleration of many new infections expected daily until the peak (if we continue to maintain social distancing and other protective measures), which is estimated to be on April 15, then new infections slowly declining until much lower levels of infections on June 1st, much lower on June 15th, and negligible levels on July 1st.
https://covid19.healthdata.org/projections

Many more interesting details and discussion in the full pdf article available by clicking the link.

Can we agree that the major problem with discussing this with any cogency is the lack of good data? Let's hope this comes with time and we will get a clearer picture of what we are facing with this novel virus if any scientists are left that are unspinnable.

In Wuhan, in the ground-central population of just over 80,000 people who were initially infected with the virus, the death rate was estimated to be 1.4%. These people had access to traditional Chinese medicine, and most people used TCM and herbs along with western medicine during their treatment. Underreporting was likely here as well. We can't begin to know how many cases are asymptomatic, unchecked, cases where people don't know if they have a cold or flu and are just resting and treating at home.
However, a very recent study (Siettos et al., 2020) used mathematical modelling, the accuracy which was confirmed by predictions for the Hubei, China initial outbreak which turned out to correspond well with the prediction from the model. They predict that 20x more people are infected than is are evident from testing, and based on this, predict an overall death rate of 0.15% (similar to the seasonal flu). They also determined the decline of infection should be at the end of February, which turned out to be true. Since the first reported cases were in late December, that means the first signs of decline should be about 2 months. For the U.S., that means declines in infections should occur in late April or early May.

A number of factors are involved with how someone who acquires an infection will fare. As always, the overall health status and present condition of the patient is the key to how things will go. This is evident in the wide range of outcomes being reported, including that 80% of people infected come through the course of the infection without major complications, and some hardly know they are infected. Considering a number of sources, the death rate for SARS-Cov-2 infections is about 0.2 to 0.5, and for the seasonal flu, about 0.15. Both of these statistics likely underestimate the influence of comorbidities in serious illness and death.

These factors include immune status, the presence of other infections, comorbidities, especially the health of the respiratory tract and cardiovascular system to begin with. For the cardiovascular system, "Coronavirus disease 2019 is associated with a high inflammatory burden that can induce vascular

inflammation, myocarditis, and cardiac arrhythmias" (Madjid et al., 2020). It's no coincidence that the highest incidence and burden of cardiovascular disease is among elderly men, as are drastic outcomes for Cov-2 infections. For respiratory tract health, breathing polluted air in the cities, smoking something for a lifetime, or shutting oneself up in overly-heated rooms with little access to fresh air, as well as lack of aerobic exercise all take their toll. One also has to consider nutritional status, overweight and obesity, pre-diabetes, diabetes, just to name some of the most notable factors.

Isn't it clear that these are more at play when determining the outcome of a Cov-2 infection than simply one's age?

More details and references in the full article I'm posting on my Facebook page later today, "Cov-19, What determines how it will affect you, and What is the True Death Rate?"

I will argue that overall, the median death rate (median meaning a value lying at the midpoint of a frequency distribution of observed values) from various countries, cities, communities is likely to be about 0.15-0.5% of total cases. Based on a number of papers I've reviewed, the median death rate for the seasonal flu is about 0.15%, and the data is from multiple cold and flu seasons adjusted for age, comorbidities, and other factors. ==As noted above, Anastassopoulou *et* al., 2020 concludes the actual death rate is likely to be 0.15% overall when considering widespread under-testing.==
According to the previous papers mentioned, the chance of dying of influenza or a Cov-2 infection is about 5x higher among those >60 years of age or so. Another recent paper (Yuan *et al*., 2020) determined that based on 27 patients with severe lung disease that were hospitalized associated with the virus (mostly older adults with comorbidities), 63% recovered and 37% died).

The point I'm trying to make is that the Cov-2 virus is not likely to be inherently more lethal or infectious than some strains of flu we face each year, statistically-speaking. It's spreading so fast because it's novel and very few had any immune interactions with it previously. As with other seasonal pathogens, we will see a peak and decline for infections once enough people have developed antibodies and other immune strategies to deal with it.

Our immune system is quite capable since it has been refined and has co-evolved with countless pathogens, some of them amazingly virulent, as long as animals have been on the planet. A recent article describes the segmented and mobile tiny "yiling bug" which is thought to be about half a billion years old (Xiao et al., 2020). In other words, our immune systems have seen it all. Since (at least to virologists) viruses are a living entity, one wonders "what's their agenda anyway?" I'm going to argue again that their "agenda" is to be part of the homeostasis-maintaining mechanisms for the giant biosphere that is planet earth. When one species gets out of control (yes, I'm talking about us), checks and balances have to check and balance.

What invigorates my ire is when the media reports that "older people" are more at risk of having serious illness and more likely to die than others, and then go on to say that this is because elderly people have weaker immune systems. Based on some data, the media is reporting that older men are the most likely to have serious consequences of the viral infection and also die from it.
But is this really true that elderly people have inherently weaker immune system? Perhaps to a small degree as we become very old. If we think of the

"Acute cardiac injury determined by elevated high-sensitivity troponin levels is commonly observed in severe cases and is strongly associated with mortality. Acute respiratory distress syndrome is also

strongly associated with mortality. Coronavirus disease 2019 is associated with a high inflammatory burden that can induce vascular inflammation, myocarditis, and cardiac arrhythmias" (Madjid et al., 2020).

If you get a chance, please read through the following article on the Off-guardian website:
Some readers of it objected to the article, calling it irresponsible and vague in some of its facts. However, based on statistics I've presented and referenced, I think some of what these medical experts are saying bear considering.
https://off-guardian.org/2020/03/24/12-experts-questioning-the-coronavirus-panic/?fbclid=IwAR1LBAOIwVsog19FGbMqACQ_xPdTvhBi5rpyYvi37tr3RA68n9EViOfH3mA&__cf_chl_jsc hl_tk__=1df2ad7f1f09041657cbcbf9a67861e1ba8e4847-1585688763-0-AeVttstxig4ucPJsMVZMfyEQkANG1eEct65B1k4qEapWLNVvz3kM0tVWs3k41icu00aXumAedAHvLvMxlcn 6JF5i3hI-TMoYr-g7ff6E7O62K5o4CW4ipggfAbit8ZACyoe787indWo4HIyVNJJNUR5dI3yEND64nW81u4fZOREJj1Zm4FhsC37 1uEHVNjk3_AeniKf5PoSDXGkl90qXObu1HOxSpE308mJwLpSuiDg_U_wzA_zGT1fvmCg1GuOMbMBE5MLl y6ikt8RkRVWzy7rv5OcGL3SludM2gRI50YZeRbcuGDWRJcTN_xA8IkS8rZOBYmNO-6rAF9nIR5gWx5vvnoGQZJ785ydSC_0sWWOGkco8hWTcgKwv7HxsQRri-ONuMLoY3PJl7ZR-0yBhYdxJ9zjWvDmRyRXyP66y4e9_jhZdW32VO2VHHqEAHsYH3g

I highly recommend reading this article on the premise that what humans are doing on this planet now is unsustainable—economically, environmentally, and politically.
https://medium.com/@franzallmayer_96499/we-are-in-the-uncharted-of-a-world-becoming-new-b335b5fc0a92

More articles will follow.

Thanks for participating in the discussion!

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