Nadeem Khan, PIDE

PIDE COVID-19 BLOG

The Fog of War

Many of us have heard of the "fog of war", a term coined by the 19th-century Prussian military writer Carl von Clausewitz. It refers to the idea that war is often conducted in a haze of uncertainty. Militaries do not fully understand either their enemy's threat or their capacity to combat it.

COVID-19 tracking is like swimming in statistics: infection cases, death rate, various percentages and economic data. But in these early stages of the fight against the Coronavirus, these data have their own limitations. We are already seeing how, in the fog of confusing data estimates, political leaders are trying to marshal the uncertainty of what public health experts recommend.

Data experts have a warning: nations have different reporting standards and testing of Coronavirus. They have even different viewpoints about tracing cases. These different standards make statistics comparatively misleading. Sheila Bird, a renowned British biostatistician and professor at Cambridge University, says "testing and reporting have been inconsistent even within individual countries".

Bird is one of the several high-level scientists calling on the UK government to conduct more Coronavirus tests and provide more revealing data. The UK government says that the health system currently cannot test everyone. According to the government, only patients who need treatment at the hospital are tested. This can lead to higher estimates as testing is conducted only on those patients who have serious conditions for hospitalization, and hence have a relatively high mortality rate.

Lisa Gitelman, New York University professor and editor of the book "Raw Data' is an Oxymoron" said, "If different nations have different standards and conditions, they at least generate a consistent curve if those standards and conditions are stable across time."

If Italy continues to test people at the same rate and the rate of increase in new cases daily begins to decline the curve starts to flatten that is good news. But the test rate needs to be the same. If the UK suddenly starts testing a lot of people and gets a big jump in new cases, it does not necessarily mean that the outbreak is spreading rapidly.

When people say that the official figures are underestimated, they forget that these figures are not exactly the real numbers. The official figures are based on only confirmed cases. Similarly, the number of suspected cases and quarantine cases are announced after confirmation from the reporting authorities. Although, these figures may be misleading, however, it is not necessary that people are being intentionally misled. People develop their perceptions and believe (or do not believe) on the numbers depending on their perceptions.

The standards of reporting data and the health capacity of a country could be evaluated by how the officials forecast future possible COVID-19 cases. Now, we have various geographical location data, whereas early research depended solely on China and that too specifically the Wuhan province data.

Based on the data available on April 1, 2020, the mortality rate varies dramatically among different countries. In the United States, where thousands of infections are recorded, the mortality rate is nearly two percent whereas in Italy it is frightening higher (see table below).

Coronavirus infected Patient Data as on 1st April 20201

Country	Cases	Deaths	Total confirmed deaths doubles	%age of Deaths in total infected
World	918129	46069	7 Days	5.02
United States	205,438	4,528	4 Days	2.20
Italy	110,574	13,155	11 Days	11.90
Spain	102,136	9,053	7 Days	8.86
China	81,554	3,312	51 Days	4.06
Germany	76,544	858	7 Days	1.12
France	56,989	4,032	6 Days	7.08

One of the reasons for this discrepancy seems to be revolving around the number of tests in a country. But experts also identify differences in demographic and political factors, such as smoking rates, average age and healthcare affecting the reported rates. For instance, reduced immunity with age is found to be a major factor in higher death tolls from COVID-19. As we can see, Italy has one of the world's oldest populations — with a median age of 46.5 and the highest death rate, while Pakistan's death rate is 1.3% with 64% of its population under 30 years of age.

Cultural considerations too factor in, says David Calvin, a microbiologist at the University of Delaware. He asserts that he has no scientific data to support this but notes that the Italians embrace and kiss each other more than others, and handshake is common in Northern Europe and North America.

To deal with such a situation where the true statistics or accuracy of data is not guaranteed, basic models and projections would not work. Steps need to be taken that go beyond the reported data or the projected models. Given the level of uncertainty of the true figures, it would be necessary to calibrate action with a level above the estimated level — a safe level. By doing this, we create a margin of safety in this war under the 'fog' created by the COVID-19 threat.

Reference:

https://www.actionnewsnow.com/content/news/569133042.html
https://edition.cnn.com/2020/03/26/health/number-of-cases-testing-data-intl/index.html
https://www.theatlantic.com/health/archive/2020/03/coronavirus-covid-19-the-atlantics-most-crucial-coverage/607906/