

EDITORIAL

COVID-19 - HOW WILL IT END

By late 2019, no one on Planet Earth could have imagined what the next year would be like. That a small piece of RNA wrapped in protein projected as spikes, hence the name Corona, would bring the whole world to a standstill, humble the best of physicians and expose the vulnerabilities of the health care even in the most developed countries, was never comprehensible.

The United States has 4% of the world's population but, as of July 16, had approximately 26% of its COVID-19 cases and 24% of its COVID-19 deaths, reflecting a deep crisis in their public health system¹.

What it has taught in such little time is amazing.

People around the world learned fast the ever-expanding terminology, like the lockdown, smart lockdown, social distancing, physical distancing, containment, mitigation, isolation, contact tracing, quarantine, and flattening the curve.

The medical professionals had mostly struggled to have a grip on the disease and the various facets it has shown, and the list of investigations to predict the outcome keeps on growing.

It has shifted paradigms, in that this being an infectious disease had patients with a negative PCR for the SARS-CoV-2 virus, a normal chest X-Ray, but findings suggestive of pneumonia on the HR CT scan.

It bent many rules, i.e., despite this being a viral disease, doctors globally have attempted to treat it with drugs which were either anti-protozoal (Hydroxychloroquine), anti-parasitic (Ivermectin), anti-bacterial (Azithromycin), or an antiviral developed against the Ebola virus (Remdesivir), used under the pretext of "Repurpose drugs" for emergency use.

We have witnessed the crumble of huge industries pushing the global economy towards recession. Work and education getting shifted

online, eliminating human contact, so essential for our wellbeing.

The most difficult part, especially in countries like Pakistan, where we have a very strong and close system of extended family and friends, has been, to not been able to reach the near ones and the dear ones during their illness. More painful than this has been the inability to attend the funerals of close family members either due to travel restrictions or the SOPs.

Coronaviruses are large RNA viruses. Out of so many of them, seven have infected humans to date. The first four cause infection of the nose and throat. SARS and MERS infected the lungs, but this SARS-CoV-2 has the capability of both².

Apart from this, the most dangerous capability is its very high transmissibility and that too through people who are either asymptomatic or pre-symptomatic, earning them the title of "Super Spreaders" or the Achilles Heel of the COVID-19³.

The pandemic will end when a significant, i.e., about 70-80% of the people develop immunity. This can happen either naturally or through a vaccine. The natural route is through herd immunity, which allows the free circulation of the virus in a community. There is a price to pay for it as lives are lost.

More than 150 candidate vaccines are in the pipeline, with seven already in the late stages of clinical trials. The question is, when will one be available, which is not only effective but also available to people all over the world. Luckily, due to its large size, SARS-CoV-2 is not expected to mutate as fast as the influenza virus, for which a vaccine is prepared every year. Till this happens, we have to kill this virus by depriving it of a living cell. Frequenting hand hygiene, not shaking hands, physical distancing, and wearing a surgical mask when around people, have proved to be very effective. This is what we have adopted as the new normal and must continue to do.

REFERENCES

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