

COVID-19 pneumonia and elevated IL-6 in China (ChiCTR2000029765),⁹ Janus kinase (JAK) inhibition could affect both inflammation and cellular viral entry in COVID-19.¹⁰

All patients with severe COVID-19 should be screened for hyperinflammation using laboratory trends (eg, increasing ferritin, decreasing platelet counts, or erythrocyte sedimentation rate) and the HScore¹¹ (table) to identify the subgroup of patients for whom immunosuppression could improve mortality. Therapeutic options include steroids, intravenous immunoglobulin, selective cytokine blockade (eg, anakinra or tocilizumab) and JAK inhibition.

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Did the hesitancy in declaring COVID-19 a pandemic reflect a need to redefine the term?

WHO's declaration that the global spread of coronavirus disease 2019 (COVID-19) is a pandemic¹ has contributed greatly to clearing up confusion in the terminology in the professional literature and the media. Discussions on when wide geographical spread of a disease becomes a pandemic tend to recur when the world is confronted with an emerging infectious disease.^{2,3} The debate around the terminology used for COVID-19 raises two important questions.

The first question is why there was reluctance to call the COVID-19 outbreak a pandemic, and the second question is whether the terminology is of any practical importance.

In almost all good textbooks, an epidemic becomes a pandemic when there is widespread geographical distribution of the disease. For some weeks, the COVID-19 epidemic, which had spread to over 100 countries, seemed to fit the classical definition of a pandemic. One could reasonably ask whether the use of the term pandemic would change any of the actions necessary to control the spread of the virus.

There are several situations in which it could be helpful to use well defined terminology to control the spread of an infectious disease. The resources for controlling a pandemic are both different, substantially larger, and generally much more far-reaching than for a localised outbreak or epidemic. Thus the terms used for the different situations could be restricted according to the control measures that are necessary. Perhaps unique to pandemics, these include considerable international coordination and collaboration in providing aid to affected countries, recruiting the necessary resources for promoting research on medications and vaccines, and developing complex risk communication. In particular, travel restrictions become a major issue and, although these are guided by the International Health Regulations, countries have the option to adopt unilaterally their own barriers to international travel. This was clearly the case for COVID-19. If the term pandemic is clearly defined, it can communicate much more clearly the seriousness of the situation and help justify the extreme measures instituted. It can also provide the international health community with a common term to enlist the cooperation of the general public and convey the necessary sense of urgency to decision makers. This should stimulate rapid



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introduction of preventive measures such as social distancing to reduce the pace of the spread, providing valuable time for upgrading of the medical services, and preparing the community.

If the use of the term pandemic is delayed too long, the declaration of the pandemic could convey a message to the public that the authorities have lost control, generating irrational panic reactions. Since it is expected, and even perhaps desirable, that the public experience some fear during a pandemic, an early declaration of a pandemic might be helpful in mitigating panic. Recruiting public cooperation is much more feasible when the society in general and the health services in particular are not yet under considerable pressure, and there is time for appropriate explanations to the public as to how the pandemic will be controlled. The question remains as to what is the optimal timing for declaring a pandemic. Following the 2009 H1N1 pandemic, Morens and colleagues⁴ provided useful criteria for defining a pandemic. They included the following components: the cause should be a new virus that has not circulated in humans previously, the disease should be widespread geographically, there should be clear person-to-person spread, and outbreaks should be explosive in nature, with a relatively high case-fatality rate. It seems to me that for some time, the COVID-19 outbreak met all these criteria.

Since there continues to be a lack of consensus about when it is appropriate to use the term pandemic, I suggest that a multi-disciplinary group of epidemiologists, infectious disease specialists, risk communicators and health administrators be convened to create new, clearer, expanded definitions of the terms outbreak, epidemic, and pandemic.

I declare no competing interests.

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COVID-19 battle during the toughest sanctions against Iran

Coronavirus disease 2019 (COVID-19) has spread rapidly throughout the world. WHO declared the outbreak a global pandemic on March 11, 2020.¹ In Iran, the first official announcement of deaths from COVID-19 was made on Feb 19, 2020. As of March 16, 2020, 14 991 people have been infected with severe acute respiratory syndrome coronavirus 2, and 853 people have died from COVID-19. 4996 people have recovered.²

The economic loss caused by the spread of COVID-19 in Iran coincides with the ever-highest politically induced sanctions against the country. Although various sanctions have been in place for the past four decades, since May, 2018, the unilateral sanctions imposed by the USA against Iran have increased dramatically to an almost total economic lockdown, which includes severe penalties for non-US companies conducting business with Iran. The Iranian health sector, although among the most resilient in the region,³ has been affected as a consequence.⁴ All aspects of prevention, diagnosis, and treatment are directly and indirectly hampered, and the country is falling short in combating the crisis.⁵ Lack of medical, pharmaceutical, and laboratory equipment such as protective gowns and necessary medication has been scaling up the burden of the epidemic and the

number of casualties. Despite WHO and other international humanitarian organisations dispatching supplies and medical necessities,⁶ the speed of the outbreak and the detrimental effects of sanctions have resulted in reduced access to life-saving medicines and equipment, adding to the health sector's pre-existing requirements for other difficult health conditions.⁷ It is shameful that besides the lives lost to this deadly virus, extreme sanctions limit access to necessary materials and therefore kill even more Iranian people.

Although sanctions do not seem to be physical warfare weapons, they are just as deadly, if not more so. Jeopardising the health of populations for political ends is not only illegal but also barbaric. We should not let history repeat itself; more than half a million Iraqi children and nearly 40 000 Venezuelans were killed as a result of UN Security Council and US sanctions in 1994 and 2017–18, respectively.⁸ The global health community should regard these sanctions as war crimes and seek accountability for those who impose them.

Given the COVID-19 pandemic and its alarming outcomes in Iran,⁹ the international community must be obliged to stand against the sanctions that are hurting millions of Iranians. It is essential for the UN Security Council and the USA to ease, albeit temporarily, the barriers to providing life-saving medical supplies to Iran. In the future, the global community must anticipate possible impacts of sanctions on humanitarian aid and move to prevent further disasters from happening.⁴ Viruses do not discriminate, nor should humankind.

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For details of the Iran sanctions see <https://www.treasury.gov/resource-center/sanctions/Programs/Pages/iran.aspx>