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# COVID-19 Pandemic: A Big Challenge in Iran and the World

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## **Facts and Figures**

The last day of December when China first reported to the World Health Organization (WHO) about unknown cause pneumonia detected in Wuhan, nobody was thinking about a pandemic of new corona virus throughout the world<sup>1</sup>. On 23 January 2020, the central government of China imposed a lockdown in Wuhan and other cities in Hubei in an effort to quarantine the outbreak of COVID-19; Although according to the declaration of WHO it was "unprecedented in public health history", it could fairly help them to control the disease<sup>2</sup>.

On 11 February 2020, WHO announced the name of COVID-19 for the severe acute respiratory syndrome induced by a new coronavirus, SARS-CoV-2<sup>3</sup>. It lasts only 70 days from the first report to the WHO until the official announcement about the pandemic outbreak of the new coronavirus<sup>4</sup>. However, it is a controversial theory about the disease's origin. At the time of writing this editorial (17 May 2020), the fatal outbreak distributed in 213 countries and territories around the world and they have reported a total of 4,723,190 confirmed cases of COVID-19, 1,813,449 (85%) recovered cases, and a death toll of 313,273 (15%) patients. Active cases with mild and critical conditions were 2,551,635 (98%) and 44,833 (2%) respectively. Accordingly, the most severely affected countries with the order numbers of affected

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and deaths include the United States (1,507,773 and

90,113), Spain (276,505 and 27,563), Russia (272,043 and 2,537), UK (240,161 and 34,466), Brazil (233,511 and 15,662), Italy (224,760 and 31,763), France (179,365 and 27,625), Germany (176,244 and 8,027), Turkey (148,067 and 4,096). The numbers were 118,392 and 6,937for Iran and 82,947 and 4,633 for China<sup>5</sup>.

### Dealing with COVID-19 in Iran and the World

In Iran, we encountered an exponential rate for two months from reporting the first case on 19 February 2020. Like people in other countries, Iranians were advised to observe health protocols released by Iran Ministry of Health and Education to help control the epidemic, although there was no nationwide lockdown like Italy. Despite the coincidence of the peak of the outbreak with the Persian New year, Nowruz (which is traditionally a time to leave home for shopping, traveling or visiting the relatives) as well as worrying about being in a home-quarantine, shops, and chain stores had seen no mad rush like USA, UK, and some other countries.

Nevertheless, Iranian government applied different strategies, with good cooperation of the community to control the disease such as 1) locking down the schools, universities, gyms, museums and public places 2) increasing public awareness using the media about the importance of considering personal and social health protocols like regularly washing the hands for at least 20 seconds, stay-at-home order, social distancing strategy, no shaking hands, using a face mask in crowded places, disinfecting all things from outside to the inside and all surfaces at home frequently 3) Imposing the travel restrictions especially during

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Nowruz Holidays 4) facilitating the e-banking transactions more than before 5) prohibition of religious gatherings, weddings, mourning, etc.

Moreover, Iranians showed an impressive empathy in different sections of society including the self-giving medical staff in the first line of defense against the virus, scientific efforts of academics in research centers/institutes and knowledge-based companies to improve their knowledge about the pathophysiology, epidemiology and immune responses against SARS-CoV-2, designing and producing molecular and serological diagnostic kits, significant collaboration between the basic scientists and clinicians to provide different hypotheses for treating the COVID-19 patients and test them within the framework of ethics committees and Iranian Registry of Clinical Trials (IRCT) and finally hardworking of non-profit organizations and factories to multiply their production of most commonly used products such as the masks, guns and disinfectant detergents. Today, we encounter a huge number of scientific papers, hypotheses, research achievements, and reports on COVID 19 outbreaks in Iran and the world.

Unfortunately, COVID-19 disease affects all aspects of human lives. Recently, some economic concerns like the increasing number of jobless people has raised serious questions on the lockdown strategy and to which extent it could be carried out. Given the global socio-economic impact of COVID-19 on countries, governments should have an appropriate policy to help the people by providing supportive materials or loans to compensate for the injuries.

Some countries have already eased the lockdown, lifted the restrictions, and let the people move out of their houses and attend some low-risk business holding. Although based on recent data, only less than 10% of people are yet positive on antibody response towards SARS-Cov-2. However, it seems that based on experiences available and information shared by some countries such as Taiwan, one of the efficient strategies would be adopting the personal hygiene, observing physical distance, protecting elderly and high-risk groups, wearing masks and personal protection equipment as the highest level of alert still exist and should not be overlooked<sup>6,7</sup>.

WHO, as the directing and coordinating authority on international health within the United Nations system

(https://www.who.int/emergencies/diseases/novel-

coronavirus-2019), had a major concern on the coronavirus crisis in the world. This organization published many reports on different aspects of COVID-19 and relative guidelines including the travel advice, situation reports (at least 90 reports), live media briefings, rolling updates and gathering global research activities on COVID-19, providing the International Clinical Trials Registry Platform (ICTRP), opening the Emergency Use Listing Procedure (EUL) for in vitro diagnostics and preparing the protocols for "Solidarity" clinical trials for COVID-19 treatments.

Lastly, in the post-Coronavirus Era, countries and territories must develop a national program with a prospective look to predict and prevent adverse psychological, social, and economic consequences of the later recurrence of COVID-19.

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