

Responding simultaneously to flood and COVID-19 in Iran

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Dear Editor,

Global climate change has increased the number and intensity of extreme climate events such as floods, heat or cold waves and drought ¹. Based on this fact, Iran has experienced massive floods during the last two decades; the most disastrous ones happened on March 2019 with two million affected people and more than four billion dollars in costs ². Iran was successful in controlling the current epidemics of viral infections after the flood in March 2019 because the health system could establish a rapid surveillance system in order to allow early detection and isolation of the patients in the field hospitals in the flood-stricken areas ².

Due to weather predictions and flood warnings by the Iranian Meteorology Organization (IMO) in winter and spring 2020-2021 for 15 provinces, coinciding with the COVID-19 crisis in Iran, flood management has become a more complex issue. Iran, like many other countries, has been severely affected by the coronavirus pandemic, and the healthcare system is being overwhelmed after 9 months of fighting against COVID-19. However, addressing this issue scientifically, literature reviews and expert panels have recommended the most important measures applicable to better management of floods during the presence of COVID-19 in Iran ³⁻⁵:

- Enhancing whole-of-society coordination mechanisms to support preparedness including the health, Red Crescent, transport, travel, security and other first responders to crisis
- Establishing emergency camps or temporary settlements for displaced populations who should leave their homes
- Early detection of the patients of COVID-19 in the displaced population and isolating sick individuals by establishing a surveillance system in emergency camps and temporary settlements
- Control of critical points for managing Coronavirus-infected waste in health care centers or field hospitals
- Meeting the flood-stricken people's emergency health needs by paying special attention to vulnerable people, particularly the elderly, women and children

- Intensive training and reminders of the public health measures, including hand hygiene, respiratory etiquette, and social distancing, by healthcare providers in the provinces that have received the flood warnings
- Supply of medicine, determination of distribution locations and how patients access outpatient drugs, and training of delivery and drug distribution personnel
- Weekly distribution of adequate quantities of hygiene items such as masks, soap, waterless antiseptic agents (i.e., alcohol-based solutions) for disinfecting hands and surfaces among flood-stricken people
- Control shared bathrooms, clean surfaces with water and detergents, and use appropriately designed toilets to prevent the contamination of groundwater resources
- Access to psychological consults and supports for flood-affected people, particularly for households that lost member(s) due to COVID-19

It is recommended that policy makers and healthcare managers in flood prone areas focus on the above measures before and during the occurrence of floods. It is important for policy makers to encourage stakeholders to manage the floods and COVID-19 using the managerial considerations that have been suggested in this paper.

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