



## COVID-19 sends STEMI to quarantine!?

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Sirs,

In December 2019, severe acute respiratory syndrome Coronavirus 2 (SARS-COV-2), termed “novel COVID-19”, emerged in China and was considered a pandemic by the World Health Organization (WHO) on March 11, 2020 [1]. So far, a sizable population of the world has been affected [2] and many have expired. Although an epidemic necessitates the organization of medical and health facilities to control the crisis, the provision of services to other patients, who may have serious conditions, should not be neglected because of the catastrophic consequences.

In Iran, 24/7 primary percutaneous coronary intervention (PCI) as the standard treatment strategy for patients with ST-elevation myocardial infarction (STEMI) [3–7] was launched in September 2015 to achieve a fair distribution of healthcare resources. Currently, 49 general and heart hospitals provide these services, with 48 915 patients having undergone primary PCI thus far.

With the outbreak of the Coronavirus, the first case of COVID-19 was officially reported on February 19, 2020. As is shown in Fig. 1, we have found a significant drop

(approximately 25–40%) in the number of documented STEMI patients who have undergone primary PCI in our 24/7 primary PCI-capable hospitals.

What may be responsible for this decline is patients’ fear of contamination with the Coronavirus in hospitals or the exhaustion of the entire health system resources by COVID-19 patients. On the other hand, the manifestation of critical STEMI with dyspnea and pulmonary edema could be mistaken with the Coronavirus features, resulting in the management of the patient as a COVID-19 case from the outset. In the worst-case scenario, the patient might expire at home due to a wasted time interval between the symptom onset and the first medical contact.

According to recent reports [8–10], the number of patients undergoing primary PCI and acute coronary syndrome admissions have also dropped significantly in other countries. Indubitably, this is an extremely worrying issue with adverse long-term consequences for patients and healthcare systems.

We suggest that the general population be fully informed as regards the symptoms of STEMI by social media. We also herewith underscore the vital importance of timely referrals to designated hospitals. Moreover, STEMI patients highly suspicious of COVID-19 should be isolated and screened via laboratory and imaging tests, and the medical staff should use full personal protective equipment (PPE).

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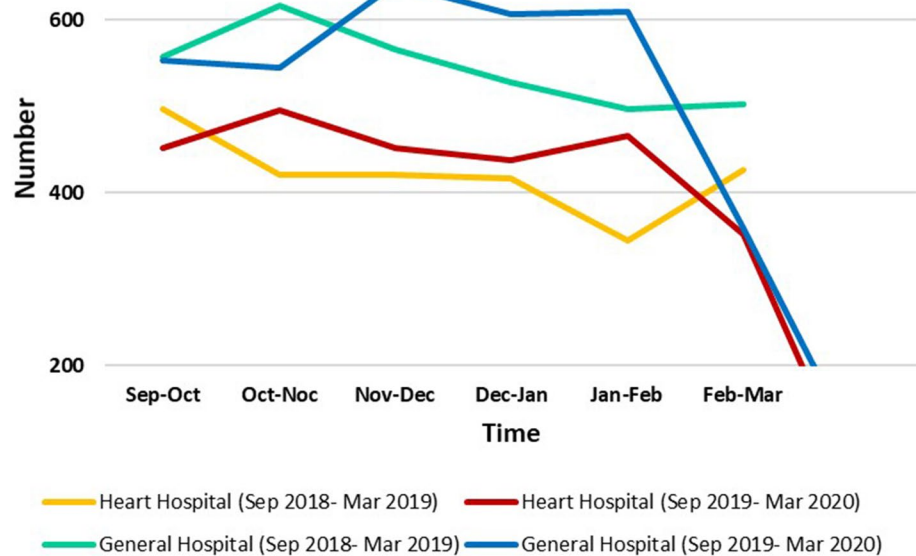
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### Availability of data and material

All data generated or analyzed during this study are included in this published article.

**Fig. 1** Trend of primary percutaneous coronary intervention in general and heart hospitals in the fall and winter of the last 2 years



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### Compliance with ethical standards

**Conflict of interest** We declare no conflict of interest.

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