

COVID-19 Concerns- Patient Priority or Emergency Department Overcrowding?

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Dear Editor

The outbreak of the novel Coronavirus that occurred in late December 2019 in Wuhan, China immediately spread worldwide and including Iran as one of the most severely affected areas in the world. Sudden and rapid transmission of the new coronavirus (COVID-19) infection took the health authorities by surprise and led to mass fear and anxiety in society. Consequently, it led to the overcrowding of the emergency departments nationwide. Patients who come to the emergency settings are routinely managed based on priority, severity and special medical conditions during normal situations. However, in pandemics such as the COVID-19, which led to a sudden unexpected overload of patients within a short span of time, was nearly impossible to apply the priorities of normal conditions for immediate patient care. The healthcare system was not prepared to handle such a sudden and prolonged emergency situation at the hospitals. Hence, the emergency care physicians select the most severe cases for immediate hospital admission, comparatively. In this setting, all suspected COVID-19 patients are screened by routine clinical examination along with a lung CT scan and laboratory tests such as CBC and CRP. Most severe cases are then admitted by the emergency physicians and other outpatients are managed with general recommendations to prevent the transmission of the infection to others.^{1,2}

In the current situations, the limited facilities, long waiting time in emergency cases, long working hours, and physical and mental exhaustion of the health care personnel are associated with the need for a second triage by the health

policymakers, departmental heads and deans.

Accordingly, it seems plausible that emergency department triage is more important than patients triage alone. Referring suspected patients with even mild symptoms of respiratory illness to the hospitals could easily interrupt the function of an active emergency department. In this situation, taking an accurate history and using vital signs are the two main components of the physician's triage for selecting the more critical cases within the least possible time (Figure 1). Moreover, with a timely and appropriate decision, most of the patients with mild symptoms may be treated and isolated in their homes.³



Figure-1. Emergency triage setting for taking a brief history and checking vital signs

For the severe cases with fever, chills and shortness of breath, the use of pulse oximetry, imaging and laboratory tests may result in rapid diagnosis and follow-up (Figure 2).

This approach may prevent further hospital involvement and avoid overcrowding in hospital emergency departments. This would also allow health care providers to focus more on critical cases and treat them earlier. Close and immediate follow-up is also necessary for those who are discharged as outpatients.

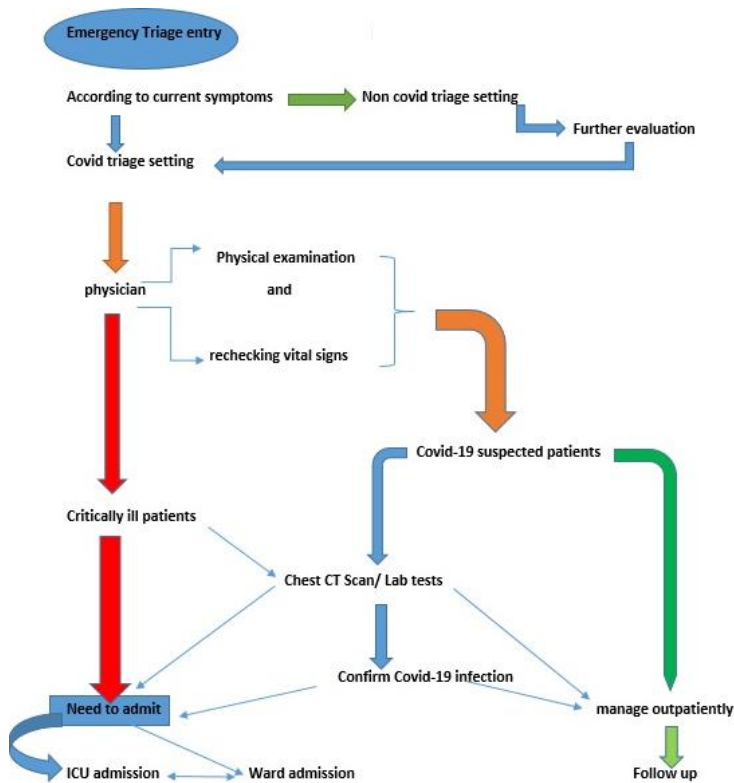


Figure-2. Emergency department triage in COVID-19 outbreak

Furthermore, direct and immediate ward admission and assessment are considered to be a common plan of hospitals. Many patients were managed directly by the pulmonologists and other specialists in the wards without any emergency visits. However, in such a challenging pandemic, this could be difficult or even impossible in some medical centers to execute. In this situation, creating multidisciplinary teams of physicians could be a practical measure for a quick assessment and careful management of infected or suspected COVID-19 patients. These teams are comprised of emergency medicine specialists, infectious disease specialists, radiologists and internists.⁴

The psychological burden on society is another cause of overcrowding of the emergency department during such outbreaks. This problem is believed to be an indirect consequence of unnecessary hospital referrals. Maintaining public trust is a part of health policy that every health system must gain at the onset. In this manner, non-pharmaceutical

medical interventions can help the available medical facilities and prevent loss of resources due to unnecessary treatment.

Creating a high-quality primary care system with a reasonable degree of reserve and flexibility is the first step in building a strong health care setting. Therefore, tracing, treatment and monitoring of the critical cases could be much easier for the health care providers.⁵

Lack of specific antiviral drugs, vaccination and rapid diagnostic tests will eventually shift the management to focus more on infected patients and screening the symptomatic ones. The assessment should be updated in accordance with the latest scientific advances in the world.

Due to the global impact and high rate of mortality and infectivity, in the management of COVID-19, it is essential to pay more attention to diagnosis and treatment of the new cases as well as implementing effective preventive measures.⁶ Hence, an internationally coordinated healthcare system can effectively manage such pandemics in affected and high-risk countries. In an outbreak such as COVID-19, the emergency physicians as the frontline healthcare providers should be aware of ED triage, facilities and isolation policies to deal with a surge of suspected cases. Using appropriate devices and methods for pre-triage, diagnosis and isolation of suspected and confirmed cases should be the final objective. However, as still a new topic, it requires further research in the future.

Conflict of Interests

None.

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