

## Effective and comprehensive management process against COVID-19: the golden key to increasing safety in the hospital environment

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### Dear Editor

Here, we will explore the key factors for effective and comprehensive management process against COVID-19 based on their empirical evidence. These factors are categorized into three axes: logistic, individual, and external. One of the important factors for ensuring the safety of treatment staff, patients, and community members is the provision of necessary equipment and facilities.<sup>1</sup> In hospitals that have been designated as referrals for COVID-19, several logistical solutions have proven to be significant. An effective measure to prevent the spread of COVID-19 is to separate infected individuals from those who are not infected. This can be achieved by conducting a triage of all patients at the entrance of hospitals. Triage helps to identify individuals with similar symptoms of COVID-19 so that they are not mistakenly placed in high-risk areas.<sup>2</sup>

After the initial visit, if a person is suspected of having COVID-19, they will be directed to a designated location for diagnostic tests and a CT scan of their lungs.<sup>1</sup> The route to this location will be pre-specified and will not come into contact with other patients. Once the diagnostic procedures are completed, the next steps will be determined.

It is also recommended that clients enter and exit the facility through a single route. This will help with disease

prevention and allow for better monitoring and control of patients. Some people may try to leave through different exit points due to fear, which can increase the risk of spreading the disease in society.

To prevent any hand contact with the entrance doors of the wards, electronic doors should be used. HEPA filters should be installed, and proper ventilation should be established. A separate dressing room for the medical staff at the entrance of the inpatient wards should be created. After finishing their work shift, the medical staff should have access to a separate area for bathing. Drinks such as mineral water, fruit juice, or milk should be provided to the personnel during each shift. Vitamin supplements should be used to strengthen the immune system. Personal protective equipment such as hats, glasses, gloves, and masks should be provided to avoid getting infected with the virus. Disposable food containers should be used. All surfaces should be disinfected with approved solutions before and after the shift. Personnel vehicles should also be disinfected according to the written program.

It is important to note that ongoing training is crucial for medical staff to improve their attitude, awareness, and performance. In terms of infection control, adherence to relevant protocols is crucial. This includes proper hand washing and disinfection, correct usage of personal protective equipment (such as maintaining distance

between the face and N95 mask and proper gown coverage), avoiding touching the head and face, refraining from using mobile phones in the ward, reporting any symptoms of disease and quarantining immediately, practicing proper collection and transfer of patient waste and dirty clothes, and continuously studying ministerial instructions and health center recommendations for COVID-19 control and prevention. These should be considered routine responsibilities of medical staff and must be strictly implemented.

It is important to consider the medical records staff at hospitals who handle patients' files after they have been discharged. They should always wear gloves and handle paper files only for the recommended time period before placing them in plastic bags and taking the necessary measures. It is also important to not overlook external factors like the risk of contamination from a person who has been in contact with a patient. In such cases, if there is any doubt about the contamination of the patient, it is recommended to test the accompanying person and quarantine them until the test results are available.

It is important to inform the relevant health center about all family members of a patient. Food given by patients' families or charitable organizations might cause problems. Before distributing such food items, it is necessary to directly consult with the hospital nutritionist and get confirmation. Patients with COVID-19 who are transferred to the hospital by Emergency Medical Services (EMS) may contaminate the ambulance, potentially infecting other patients during subsequent dispatches. To solve this problem, a special ambulance car wash should be set up in the hospital environment where the vehicles can be disinfected and washed immediately.

Based on the materials mentioned, it can be concluded that in order to boost immunity against COVID-19, it is crucial to establish coordination between the human and material resources within the organization. This includes creating an effective network, facilitating favorable communication, and implementing comprehensive and efficient management practices. The role of managers in controlling this crisis is particularly important, as they must plan effectively, make proper use of facilities and equipment, distribute and adjust human resources

appropriately, and monitor and control external threats, turning them into opportunities whenever possible.

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### Abbreviations

Emergency Medical Services: EMS;

Coronavirus disease 2019: COVID-19.

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By submitting this document, the authors declare their consent for the final accepted version of the manuscript to be considered for publication.

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