Establishment of Emergency Department Intensive Care Unit

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Abstract

With the increasing number of patients admitted to emergency department (ED) there is a raise in ratio of patients with severe conditions, who have not yet been admitted to other specialist services or their disposition to other departments has not been done due to overcrowding; therefore, the need for providing intensive care in ED is felt more than ever. Patient overcrowding in ED is one of the most common international concerns. Delays in admission and disposition of patients to intensive care unit (ICU) happen in most crowded hospitals that lack free ICU beds. This problem is not restricted to our country and can even be seen in many developed countries. ICU beds only make up an average of 1.2 – 6.3% of all beds in a hospital, while more than 15-20% of the hospital budget is dedicated to them. Studies have shown that patients with severe conditions in need of intensive care stay longer in ED and insufficient monitoring and non-standard care in this department can jeopardize the safety of these patients and result in side effects and undesirable outcomes for them. Long ED stay of patients in need of intensive care leads to increase in ventilator-induced pneumonia and mortality. Most EDs lack the required human resources for providing the care patients with severe conditions need. Therefore, providing cares such as changing the position of patients for reducing the chance of developing bedsore or keeping mouth hygiene in those under mechanical ventilation in a crowded ED is very difficult if not impossible. Patients with potentially reversible severe diseases reap the most benefit from intensive care. Based on type and quality of care provided, 2 to 80% of patients in ICU are only under cardiopulmonary monitoring and not receiving a vital and effective treatment. Currently, considering the increased number of severely ill patients in need of intensive care and their long ED stay, providing equipment and resources needed such as cardiac monitoring, ventilator, and trained staff for providing intensive care for severely ill patients is necessary in ED. This has been tested and proved successful in many countries, which have a longer history in providing intensive care in ED. Nowadays there is a critical care unit in many developed EDs. In addition, emergency physicians that have been trained in the field of critical care are working in these units as emergency critical care specialists. It seems that establishing critical care training courses for emergency physicians and initiating an intensive care fellowship course with high capacity for providing intensive care is necessary in our country. Existence of these specialists not only provides compensation for scarcity of intensive care specialists, but also increases the quality of critical care in ED and facilitates coordination between ED and ICU.