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| **ORIGINAL ARTICLE** |

**Analysis of the causes of length of stay more than 24 h in the Emergency Department of Tehran’s Imam Hossein Hospital in 2017-2018**

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| **Abstract** |  |

**Introduction:** In ideal conditions, the maximum length of stay in the Emergency Department (ED) is 6 h. Increased length of stay for patients has harmful effects on the quality of patient care and patient satisfaction and causes overcrowding in the ED. The present study assessed the causes of length of stay more than 24 h in the ED of Imam Hossein Hospital affiliated to Shahid Beheshti University of Medical Sciences in Tehran. **Methods:** This descriptive study was conducted during a 12-month period, 2017-2018, in the ED of Tehran’s Imam Hossein Hospital. The samples were randomly selected from patients referring to the ED of Imam Hossein Hospital. The data collection tool was a checklist containing information about patients and the actions taken in the ED and the final outcome of the patients. After encoding the collected data, statistical analyzes were done using the SPSS statistical software version 18. **Result:** Men and women constituted 54.7% and 45.3% of the participants, respectively. The participants below and above 65 years old made up 52.6% and 47.4% of the sample group, respectively. Moreover, 81.3% were admitted to general/internal ED and 18.7% were admitted to trauma/surgery ED. Lack of empty beds in admission ward and intensive care unit (ICU) ward was the main causes of delay in admitting patients. Low patient turnover rate, involvement of multiple therapeutic services, inaccurate diagnosis, delay in lab results, delayed imaging, and the possibility of improvement in condition of the patient in ED were among other notable causes of prolonged stay. Finally, the majority of the patients were hospitalized and referees to other centers had the least frequency. Comparison of trauma and general EDs regarding causes of prolonged length of stay showed that there were no significant differences between the two EDs in prolongation length of stay. **Conclusion:** According to the results, lack of adequate admission and ICU beds was the main causes of prolonged stay in the ED. Using EMS diversion, increasing the number of admission and ICU beds, referring patients to other centers, setting up emergency care units, and decreasing patient ED overcrowding are suggested as solutions to decrease length of stay in ED.

**Keywords:** Emergency service, hospital; length of stay; hospitalization