

Disposition of Patients Before and After Establishment of Emergency Medicine Specialists

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Introduction: Emergency department (ED) as the fundamental part of hospital has a specific importance due to admitting the most various and sensitive group of patients. The aim of the ED is presenting services with highest quality in the least time. To reach this goal establishment of an emergency medicine specialist who performs assessment, resuscitation, stabilization, detection, and maintenance of emergency patients is noteworthy. The aim of this study was evaluating the effect of establishing the emergency medicine specialists on the performance of ED in Poursina Hospital, Rasht, Iran.

Methods: In this cross-sectional study files of all patients hospitalized in the ED of Poursina, Rasht, Iran, through 2005-2012 were evaluated. Variables such as age, gender, cause of refer and number of hospitalization, number of discharging from department, percentage of bed occupation and daily bed occupation, time of hospitalization, number of discharging under six hours, number of transportation to other wards or hospitals, and the rate of bed circulation in the ED were assessed, too. Data was gathered through hospital information system and analyzed using SPSS 20.

Results: Through 2005 to 2012 number of admitted patients in the ED has increased so that the most admitted number was related to 2012 ($p=0.0001$). The present of discharged patients under six hours and the rate of direct discharging before the presence of emergency medicine specialists have increased from

15.5% and 58.9% to 23.4% and 61.2% in after their presence, respectively($p=0.001$). Transporting to other wards and hospitals were also decreased from 41.1% to 38.8% ($p=0.0001$). The occupied beds percentage after presenting of emergency medicine specialists has noticeably decreased compared to the past, while bed turnover rate increased. In other words, the bed turnover mean has increased from 354.5 ± 108.4 during 2005-2008 to 637.7 ± 30.8 through 2009-2012 ($p=0.002$). Also, during 2005-2008 the hospitalization mean of the patient has remarkably decreased from 1.08 ± 0.44 days to 0.35 ± 0.05 days in 2009-2012 ($p=0.021$). The occupied bed mean before and after the presence of emergency medicine specialists were 12173 ± 3453 and 6217 ± 219 , respectively, showed a descending trend into the past ($p=0.018$).

Conclusion: It seems that presenting of emergency medicine specialists in health system leads to improve the service delivery to patients and decrease the waiting time. Also with decreasing the waiting time of patients and timely disposition, more prepared beds can be accessible in the ED for future admission.

Key words: Emergency department performance index; emergency medicine; patient discharge; triage