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| ORIGINAL ARTICLE |

**Assessing the Predictive Factors of Success in Receiving Clinical Competence at the End of the Residency Program Among Emergency Medicine Residents; a Retrospective Cohort**

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| Abstract |  |
| **Introduction:** Emergency is one of the most important departments of the hospital and its quality of service is very important. Emergency medicine is a multidisciplinary specialty and interacts with other specialties. Ensuring the scientific and practical efficacy of emergency physicians is of paramount importance. This study examines the factors affecting residents’ academic success. **Methods:** This historical cohort study was performed aiming to determine the indices predicting success among emergency medicine residents in Tehran University of Medical Sciences in gaining clinical competence by the end of their residency program. Initially, variables were extracted through a literature review and the list was discussed and completed in a session where a number of professors with experience of educational responsibilities were present. 27 criteria were included in the final questionnaire and were scored using a 5-point Likert scale. The questionnaire was sent to 150 graduated residents and response rate was recorded. Residents’ graduation score, which is given on the scale of 150, was considered as the indicator of academic success. **Results:** A total of 150 emergency medicine graduates were enrolled in the study. Of these, 95 completed the questionnaire. Fifty four were male and 55 were married. 40.35% of the married participants had children and 67.27% of their spouses had a job at the time. 68.42% of the participants lived in Tehran throughout their residency program and 58.95% declared no financial problems. Twenty three had a history of serious artistic activities and 36 had a history of serious sport activities. 5 had finished the program in more than 3 years due to being failed. In the multiple regression analysis, after eliminating confounding factors, being selected as the top resident had the strongest correlation (r=7.88 P=0.001) with their certification exam scores. This was followed by artistic activity (r=4.58 P=0.03), gap between medical school graduation to residency (r=1.53, P=0.004). In addition, age (r=-.96 P=0.046), and university entrance exam rank (r=-0.0027 P=0.002) had reverse correlation with their certification exam scores. **Conclusion:** The results of this study showed that among the studied indices, being the top resident had the most significant direct correlation with academic success. The study also found that academic success had a significant direct relationship with artistic activities and gap between medical school graduation and residency, and a significant reverse correlation with age followed by university entrance exam rank. |
| **Key words:** Emergency Medicine, Internship and Residency, Academic Success, Educational Measurement, Clinical competence |