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| ORIGINAL ARTICLE |

**The automatic vending system and disposable equipment in emergency unit and effect on work procedures in Rasoule Akram hospital in Tehran**

Mohsen Abbasi¹, Zahra sabzeh Noughabi², Abbas Ebadi\*³, Maryam Moghimian4

1. Emergency Medicine Management Research Center, Rasoul-e-Akram Hospital, Iran University of Medical Sciences,Tehran, Iran.
2. Allame Bohlool Gonabadi Hospital, Gonabad University of Medical Sciences, Gonabad, Iran.
3. Department of Emergency Medicine, Faculty of Medicine, Allame Bohlool Gonabadi Hospital, Gonabad University of Medical Sciences, Gonabad, Iran.
4. Department of Basic sciences, Faculty of Medicine, Gonabad University of Medical Sciences, Gonabad, Iran.

**\*Corresponding author:** Abbas Ebadi, Department of Emergency Medicine, Faculty of Medicine, Allame Bohlool Gonabadi Hospital, Gonabad University of Medical Sciences, Gonabad, Iran, Tel: 09151998572, Email: Ebadi.abbas@yahoo.com

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| Abstract |  |
| **Introduction:** Currently, due to the limited funding of the health care system as an industry, it is necessary to provide vital services without the least waste of time and resources, and one of these is the provision of equipment for the provision of services. The aim of this study was to determine the availability of equipment for serving patients referred to the CPR department of Hazrat Rasoul-e-Akram Hospital in Tehran, as well as the problems associated with any pharmacy system and automated inventory system. **Method:** This descriptive cross-sectional study was performed on emergency patients in the CPR department of Rasoul-e-Akram Hospital of Iran University of Medical Sciences during the year 1397 (sample size 200) that needed emergency services. The availability time of equipment was measured in two groups by the pharmacy method and using the automatic sales mechanism. **Results:** The average time taken to receive supplies from the time it took with the pharmacy system was 167 seconds, while it took 28.3 seconds with the automatic inventory system, which was a significant difference (p-value <0.001). The weaknesses of this system were: lack of connectivity to the Hospital HIS, inadequate equipment, crowded CPR, device charging, and lack of RFID cards. **Conclusion:** The results showed that the use of this device for delivery of the equipment in the emergency ward increased the speed of the work, and the availability of the device for other emergency departments and its use for delivery of medication was also necessary. | |
| **Key words:** Automatic Inventory System, RFID, CPR, Time Management | |