

## **Evaluation of pre-hospital emergency status in trauma patients transferred to Fatemi Hospital in Ardabil in 2022**

### **Abstract**

**Background:** Prehospital emergency is in fact a community-based system that responds to the medical needs of the injured or patients with acute and emergency diseases, outside of health care institutions until they are transferred to a medical center. The most important components of a prehospital emergency include organization, training, manpower, transportation, and communications.

**Aim:** The aim of this study was to determine the pre-hospital emergency status of trauma patients transferred to Fatemi Hospital in Ardabil in 2022.

**Materials & Methods:** This descriptive cross-sectional study was performed in 2022. The research environment was all 6 emergency stations in the city of Ardabil. Data were collected from all databases after obtaining permission from Ardabil Emergency Medical Center through observation, interview, review of files and documents, and completion of existing checklists. Using a researcher-made checklist, the researcher gathered the required information and, in order to reduce the error, an observer who was not employed in any of the mentioned databases. Supervised data flow. Checklist questions were prepared in three areas of equipment, manpower and time.

**Results:** According to the statistics of Ardabil Central Emergency Center, the number of emergency personnel in these urban bases was 45. The average age of the staff was  $32.65 \pm 4.25$  years. Also, the average work experience of these people in our study was  $2.56 \pm 8.34$  years. 22 people (48.8% of technicians) had an associate degree and the rest had a bachelor's degree. Also, 41 (91.1%) of these emergency center personnel had enough information to carry out urban missions. Patient transportation equipment in 85.73% of ambulances, ventilation and respiration equipment in 89.28% of ambulances, fixed maintenance equipment in 72.9%, diagnostic equipment in 97.62% and equipment necessary for vital medical management only In 22.85% of the ambulances, they were in accordance with the standards of the National Standards Organization and the notification protocols of the Ministry of Health. Nursing and bandaging equipment also met the standards in 85.7%, injection equipment or materials in 64.3%, protection and rescue equipment in 57.1%, and communication equipment in 100% of the cases. The average response time for 400 missions was 7.23 minutes. Departure time (delay time) averaged 1.11 minutes.

**Conclusion:** Ardabil emergency response time in most cases is less than 8 minutes, the condition of Ardabil ambulance equipment is far from existing standards and the performance of human resources in Ardabil emergency centers was considered acceptable.

**Keywords:** Pre-hospital emergency - Trauma - Response time