A comparative study of road ambulances equipment based on the national standards in Guilan province

Soodabe Vatankhah¹, Ehsan Kazamneghad², Majid Pourshaikhian³

¹ Department of Health Services and Management, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran
² Department of Biostatistics, Guilan University of Medical Sciences, Rasht., Tehran, Iran
³ Disasters Health and Management, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran

Correspondence Address:
Majid Pourshaikhian, School of Health Management and Information Sciences, No. 6, Rashid Yasemist., Vali-e-asr Ave., Tehran - 1995614111 , Iran

DOI: 10.4103/2347-9019.122407

Introduction and Objectives: Prehospital emergency care is a part of healthcare delivery systems. Despite the high incidence of road traffic injuries and socioeconomic consequences and importance of the quality of early interventions on the scene, few studies have been conducted in this field. This study was conducted to compare road ambulances equipment based on the national standards in Guilan province.

Subjects and Methods: This is a descriptive, cross-sectional/analytical study in 2012 and its population included all active province relief road centers' ambulances. Data collection tools included merged checklists that was completed by the researchers which referred to all relief road centers. Data collections were performed using census method and analysis of data by using descriptive and analytical statistics.

Results: The overall average road equipments of ambulances of Guilan Province, according to standards of Ministry of Health (MOH) and Iran's Standard National
Organization was about 51 and 49%, respectively. The average equipments according to the two standards, in fixed appliances group: 72 and 72%, the equipments of respiration/ventilation: 95.3 and 94%, diagnosis group: 56.6 and 62%, injection/drugs: 74 and 59%, equipments of treatment critical management: 19 and 21%, nursing care/bandage: 29 and 26.6%, and protection/rescue were 43 and 38.5%, respectively. According to results and according to the two standards, 76.7 and 66.7% of ambulances had all equipments related to airway/ventilation management, respectively.

**Conclusion:** The best state of ambulance equipments was related to the airway/ventilation management and the poorest state of facilities was about equipments of treatment critical management, that it is very important. The deficiencies of emergency ambulance equipments reduce the efficiency of emergency road performance, therefore, it seems eliminating the deficiencies in ambulances equipments and achieving the national standards is essential.