Pre-hospital emergency status in Iran with an emphasis on road accidents: a systematic review

Mohammadkarim Bahadori 1, Fatemeh Ghardashi*1, Ahmad Reza Izadi 1, Ramin Ravangard 2

1 Health Management Research Centre, Baqiyatallah University of Medical Sciences, Tehran, Iran
2 School of Management and Medical Information Sciences, Shiraz University of Medical Sciences, Shiraz, Iran
*Corresponding author: Fatemeh Ghardashi (PhD Candidate of Medical Technology and Research Management), Health Management Research Centre, Baqiyatallah University of Medical Sciences, Mollasadra Street, Tehran, Iran. Tel.: +98.2182482417. Fax: +98.2188057022. E-mail: f.ghardashi@yahoo.com

**Background:** Due to the high number of road accidents in Iran, pre-hospital care plays a vital role in saving the lives of trauma patients. Although several studies have been conducted on the pre-hospital emergency status and its indicators, there are no comprehensive studies presenting its status.

**Objective:** Therefore, this review examines Iranian studies conducted on pre-hospital emergency status.

**Materials and Methods:** This was a systematic review in which all articles published in Persian and English languages in Iran and other countries from 2004–2014, which were indexed in the valid databases were studied. These articles were found by searching Iranian electronic databases including SID, Iran Medex, IranDoc, and Magiran, as well as the international scientific databases including Medline, Embase, Scopus, and Google Scholar. In addition to the mentioned databases, country statistics were also used. The required data were collected using a data extraction form that was designed and based on this study’s objectives. The articles were examined in two categories namely the structure and function of pre-hospital emergency.

**Results:** After reviewing all articles found, 19 articles were selected as follows: 5 review articles (16%), 4 descriptive-analytic studies (21%), 2 qualitative studies (10.5%), 2 experimental studies (10.5%), and 6 descriptive studies (42%). Of the 19 articles, 14 articles (73.5%) had been published in English. The target populations were employees (10.5%), patients (16%), professionals and experts (31.5%), data review (16%), and the pre-hospital emergency bases (26%). Most of the studies (68%) were related to the pre-hospital emergency functions.

**Conclusion:** The number of studies conducted on the pre-hospital emergency is limited in Iran. It seems necessary to pay special attention to the areas of prevention, process of providing pre-hospital emergency services as well as foresight, systemic vision, developing a comprehensive research program, developing a roadmap, and performing a needs assessment to promote population health and well-being.

**Keywords:** Emergency Medical Services, Iran, systematic review.