



## Telephone and wireless performance evaluation of pre-hospital emergency Kohgiluyeh and Boyer Ahmad in year 2016

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### ABSTRACT

**Background and Purpose:** Emergency first-line treatment of emergency. The timely arrival of an ambulance could be more injuries from an injury time for a patient is critical and can minimize the time responded to the needs of patients and victims. In the pre-hospital emergency patient when dealing with life Time can have a direct impact on the treatment and transfer patients In this study by examining the factors that can minimize the time to examine and time can be minimized by communication tools such as mobile and wireless phones, and so did.

**Materials and Methods:** This study is a prospective, quasi-experimental on all pre-hospital emergency setting Kohgiluyeh and Boyer Ahmad was conducted in year 2016. In this study, data collection through the questionnaire. The data were collected from both groups were analyzed using SPSS software.

**Results:** The results showed telephones wireless communication system performance indicators in most pre-hospital emergency care in this province are almost the same.

**Conclusion:** The use of wireless and mobile systems according to many benefits in health systems is essential.

**Key Words:** Emergency Pre-hospital wireless and mobile systems, time management

### INTRODUCTION

The emergence of the Internet and its expansion has created many changes in both science and industry, medicine has not been an exception, Internet in addition to the effects that it had on their progress in developing and improving health care services also had a significant impact. After the computer information systems developed and developing countries and global computer networks such as the Internet, everyone started to think that informing the system to their advantage. The therapeutic segments also thought or via the Internet to provide better services to all people because this was the most important task In all countries, health services and health care systems are presented to the public (1). These systems and are large and complex network of hospitals, clinics and diagnostic facilities, physicians, nurses, pharmacists, patients receive the information

Systems, That one of these systems or parts of the emergency (2). As the emergency hospital and healthcare system is introduced one of the most critical parts and special parts of health service centers and is known as a front-line hospital and prehospital emergency medical services system. The system of pre-hospital emergency health care system is involved Prehospital Emergency Care (ems) includes all medical assistance that this relief, including patients and patients emergency indoor events services for patients and accident victims is to minimize damages (3). Medical emergency 115 system's task in the shortest possible time to achieve clinical and therapeutic services and transport to medical centers is ) Having a strong and effective communication during emergency missions (ems) was conducted to determine the success or failures As a result, emergency communication unit (Dispatch) whose task is to respond to the caller, the trained nursing

personnel - general practitioners has been formed to do telephone counseling and guidance for non-emergency ambulance dispatching prevent In the prehospital use of wireless connections by phone to citizens and is done for staff 115 phone number for emergencies in the day in Iran is at the service of citizens After contact with citizens Emergency Communications Center stated mission wireless system base Michaud Kohgiluyeh and Boyer Ahmddr the 115 emergency telephone system currently 115, including seven hotline for citizens who are If necessary that citizens can use this number to And emergency personnel in the center to confirm the mission of the wireless system with vhf channel frequency is 800 MHz Hrtzastfadh(4). Pre-hospital Emergency philosophy is the best use of time. Time management and communication tools such as telephones, wireless, etc. is possible Since saving the lives of many injured and in need of emergency services will be subject to standard fast performance and communication. Therefore, this study is part of the priorities and necessities and aspirations of both systems health or save the life of a patient emergency (ps) .ps time management plays a crucial role in saving lives(5). Lack of attention to this issue in cellular communication and wireless system performance in pre-hospital emergency could have serious consequences This study aimed to evaluate the performance of cellular communication and wireless system in the prehospital Kohgiluyeh and Boyer Ahmad was conducted in year 2017. The aim of this study was to investigate the telephone system, wireless communication and that communication with the outside, by phone and within the emergency system with wireless and cell phones.

## MATERIALS AND METHODS

This is applied research and to investigate the relationship of descriptive - has been used. The data collection requirements and research non-descriptive (non-experimental) that is correlational survey method was possible in two ways.

- A) complete census of the population under study
- B) sampling and sample selection that represents the community

The population of the study, according to the variables listed and discussed the issue of pre-hospital Emergency Kohgiluyeh and Boyer Ahmad was raised. The data in this study a combination of both library and field use and in the study were collected through questionnaires. In this study, data logging systems and emergency communications needs to be taken. At the end of each 24-hour shift can collect this data into our database designed to study and in 2016, according to the definitions of the Ministry of Health and the Center for Disaster Management and Emergency medicine was assessed. This research forms to evaluate the system and its performance was put on the emergency communications system operators And were given necessary training to them about filling them.

## RESULTS AND DISCUSSIONS

According to the results find of study, mean and standard deviation, performance indicators Wireless communications and phone systems in pre-hospital emergency Kohgiluyeh and Boyer Ahmad in year 2016. In the majority of pre-hospital emergency care in this province are almost the same. Probably due to the similarity of the results tables, mean, standard deviation, performance indicators phone systems, wireless communications and pre-hospital emergency care in most of the province. The same geographic area and similar infrastructure. Other factors influencing health and enumerated. According to the results tables. Difference in tests statices performance wireless communications and phone systems in the first six months of the second half of the year. In the prehospital Kohgiluyeh and Boyer Ahmad in year 2016 the average results performance indicators Wireless communications and phone systems in the second half year pre-hospital emergency Boyer and Boyer Ahmad province has been increasing. Probably due to the growth of wireless communications and phone systems in the second half-year pre-hospital emergency care in the province, Increased travel times and crowding in roads and high traffic, causing accidents and the need for emergency services And increasing time wireless communications and phone systems in the second half year pre-hospital emergency Kohgiluyeh and Boyer-Ahmad.

Table 1- Table of Mean and Std. Deviation performance indicators of emergency communications system operators of pre-hospital Emergency Kohgiluyeh and Boyer Ahmad

Variable	Mean	Std. Deviation
Evaluation of the telephone system and wireless emergency	1.85	.46
Phone and Wireless role in minimizing time to bedside	1.88	.46
Disconnection problem in emergency communication system	1.65	.46
The number of cut-off with emergency bases in one year	1.62	.47

Table 2- Table of test static Mann-Whitney U, difference in performance wireless communications and phone systems in the first six months of the second half of the year of pre-hospital Emergency Kohgiluyeh and Boyer Ahmad

Variable	Group	Number	Mean	Std. Deviation	Std. Error Mean
Evaluation of the telephone system and wireless emergency	six months of first	186	1.39	.490	.036
	six months of second	179	1.97	.165	.012
Phone and Wireless role in minimizing time to bedside	six months of first	186	1.39	.490	.036
	six months of second	179	1.97	.165	.012
Disconnection problem in emergency communication system	six months of first	186	1.39	.490	.036
	six months of second	179	1.97	.165	.012
The number of cut-off with emergency bases in one year	six months of first	186	1.40	.491	.036
	six months of second	179	1.97	.165	.012

## CONCLUSION

The use of wireless and mobile systems according to many benefits in health systems is essential, Today's world is a world of constant changes and developments and to adapt to changes is essential to survival and survival. If we look at an organization's attitude to the hospital, then we look in comparison to those changes. The patient's condition will change in customer and patient satisfaction than before will be considered. Professionals and managers in the field is preparing to take better prepare themselves for the future. This study aims to provide a detailed report of examination performance and wireless telephone communication system of pre Kohgiluyeh and Boyer Ahmad. In line with health technology and implementation of change in hospital practices And a program to improve hospitals Kohgiluyeh and Boyer Ahmad, preparation and presentation of the

Wireless technology is progressing rapidly. This technology has many applications in health care(6). Patychys and research collaboration in the field of wireless telemedicine have done. They have a variety of successful case studies in the field of electronic health records, emergency telemedicine, teleradiology and looked at home Based on a variety of medical applications systems and wireless remote introduced. It should be noted that despite all the advantages of wireless systems in telemedicine, development and set up of these systems is very expensive and often does not fulfill the requirements (7).

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