

The Importance of the Role of Emergency Paramedics in Quickly Transporting Traffic Accident Cases to Health Facilities

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Abstract

This study aims to know the effect of ambulance transportation in reducing the rate of injuries for people injured in traffic accidents, the importance of the role of emergency paramedics in reducing the rate of injury for people transported to health facilities, a questionnaire was prepared via Google Drive and distributed to the population between the ages of 25-55 years from Men and women in the holy city of Mecca. The questionnaire was distributed via the social networking program (WhatsApp) for the purpose of distancing. 400 questionnaires were distributed, and 380 responses were obtained via email to the principal researcher. it concluded that everyone mentioned the importance of paramedics in transporting all dangerous cases (whether traffic accidents or other) in record time and with a very high degree of professionalism.

Keywords: the importance, of the role of emergency, paramedics, in quickly transporting traffic accident cases, to health facilities.

1. Introduction

Emergency Medical Services (EMS) provide out-of-hospital acute medical care to different types of serious emergencies, such as life-threatening allergic reactions, poisoning due to ingestion of drugs and chemicals, lethal venoms of snakes, accidents involving bones and skull fractures, brain injuries, respiratory failure, cardiopulmonary blockade, cardiac arrest, febrile seizures, drug overdose, burns and shocks and child abuse, in addition to transport of the patients to definitive care. ^(1,2) The team of EMS includes the emergency physicians who have additional expertise in EMS, the paramedics (including the technicians), firefighters, and ambulance

employees. The levels of services available constitute three categories; Basic Life Support (BLS), Advanced Life Support (ALS), and care by traditional healthcare professionals

(nurses and/or physicians) working in the pre-hospital setting and even while on ambulances. ⁽³⁾ While the physicians and nurses are rarely available for the pre-hospital emergency care, most of the exigencies are managed by paramedics, including technicians and the driver of the ambulance. A paramedic is a trained health professional who is the first responder to the patient in medical emergency. The paramedics provide out of hospital medical assessment, treatment, and care. There are varying levels of paramedic practice and the employing authority determines their allotment to a specific level of care. ⁽⁴⁾ Although the paramedics are not medically qualified, they get adequate training in the tasks they have to carry out. Nevertheless, they face several barriers and obstacles in the discharge of their duties, in addition to humiliation and dishonor. There are many barriers and obstacles, including traffic congestion, nuisance by bystanders and family members, incompetence of doctors and the administration, lack of trust -and confidence bestowed on them, lack of independence -given, patient's resistance, interference of legal issues and litigation proceedings, impression of people, and the family of the patients about the paramedics. These obstacles interfere with the performance and efficiency of paramedics. In view of a paucity of literature on the subject, it was found worthwhile to investigate the views of the paramedics by constituting a questionnaire, in order to understand their working and finding means and ways to improve their environment. road traffic incidents (RTIs) are responsible for the largest proportion of unintentional injury and mortalities in the world. At present, they are estimated to be the ninth leading cause of deaths globally at 1.25 million each year especially among those aged 15–44 years. They are predicted to become the 5th leading cause of deaths by 2030 unless urgent actions are taken ^(5, 6). Considerable socioeconomic costs result from the deaths, injuries and serious disabilities due to RTIs. This places a considerable burden on the public health systems. As if that is not bad enough, RTIs also bring serious economic impacts as the lives lost often represent a loss of physical manpower, skills, experience and knowledge that is not easy to replace. In the LMICs the economic loss due to RTIs is estimated to cost countries between 1 and 3% of their total Gross Domestic Product (GDP) per annum ^(5–7).

2. Material and Methods:

The study began in (the city of Mecca in the Kingdom of Saudi Arabia), and the study ended with writing the data collection in September 2024. The researcher used descriptive analysis, an approach that uses quantitative or qualitative description of the social phenomenon (the importance of the role of emergency paramedics in quickly transporting traffic accident cases to health facilities). The independent variable (percentage of people transported by emergency ambulance to health facilities in general) and the dependent variable (percentage of people transported by emergency ambulance in traffic accidents to health facilities). This type of study is characterized by analysis, reason, objectivity, and reality. It is also concerned with individuals and societies, as it studies the variables and their impact on the health of the individual, society, and the consumer, and the spread of diseases and their relationship. For demographic variables such as age, gender, nationality, and marital status. Status and occupation ⁽⁸⁾, and use the Excel

2010 Office suite pie chart to sort the results ⁽⁹⁾. The questionnaire is a wonderful and useful tool for collecting a huge amount of data, but the researchers were not able to conduct personal interviews with the participants in the online survey, due to social distancing rules at the time to prevent infection between participants and researchers, the questionnaire was only answered electronically, and the questionnaire consists of eleven questions, all of which are closed-ended.

3. Results and discussion:

The percentage of approval to participate in the questionnaire was 94.7%, and the percentage of rejection was 5.3%. As for the age percentage of the participants, it was as follows: from the ages of 25-34 years it was 76.3%, from the ages of 35-44 years it was 15.8%, and from the ages of 45-55 years it was 7.9%. As for their gender, the percentage of males was 73.7% and the percentage of females was 26.3%. As for their educational status, it was as follows: secondary school 54.1%, health diploma 13.5%, master's 24.3%, while for holders of a doctorate and intermediate certificate it was equal at 3.8%. As for their professions, they were: government employee (both genders) 52.6%, not working 15.8%, student (both genders) 28.9%, self-employed (both genders) 2.7%, and finally a housewife and a private sector employee, equal to 0%. As for their responses to the questionnaire questions, they were as follows: First question: The paramedic is the person who provides quick assistance to the injured person when an accident occurs, God forbid, in order to reduce the seriousness of the injury until the doctor arrives? Yes 95.5% and no 4.5%. Question two: The paramedic provides assistance in emergency situations or accidents during the first minutes of injury? Yes 88.9% and No 6.5% I don't know 4.6%. Question Three: In traffic accidents, does the paramedic ask a passerby to direct traffic and divert him away from him and the injured person? Yes 68.2%, No 13.6%, and I don't know 18.2%. Question Four: First aid procedures are the first steps that must be followed to care for the injured and injured in order to preserve their lives and then mitigate the damage and disabilities? Yes 93.3%, No 1.6%, and I don't know 5.1%. Question five: The paramedic must confront any emergency situation quickly and calmly. He must not put himself in any danger. He must announce upon arriving at the scene of the accident that he is a trained paramedic. And if there are no doctors or nurses at the scene? Yes, 80%, No, 4.4%, and I don't know. 15.6%. Question Six: The paramedic must pay attention to the dangers of fire, and not forget to turn off the engine of the car or cars present at the scene of the accident? Yes, 77.8%, No, 8.9%, and I don't know, 13.3%. Question Seven: Can bystanders be used to assist the paramedic in treatment, such as controlling severe bleeding, holding the injured limb, calming the crowd, and organizing traffic? Yes, 73.3%, and No, I do not know, 13.3%. Question Eight: If the paramedic is forced to call for help, such as the police, firefighters, or The person in charge of electricity or gas, should he choose the appropriate message carrier? Yes, 75.6%, No, 11.1%, and I don't know, 13.3%. Question nine: the paramedic must verify the phone number he is calling, and then inform him to deliver the message? Yes, 75%, no, 9.1%, and I don't know, 15.9%. Question ten: the paramedic must be trained to deal with all emergency cases and dangerous situations in traffic accidents? Yes 95.6% and No I don't know, both 2.2%. Last question: The paramedic must have undergone extensive training courses in his field of work, to deal with all emergency cases? Yes, 86.4%, and No, and I don't know, both 6.8%.

Table: no-1: the importance of the role of emergency paramedics in quickly transporting traffic accident cases to health facilities according to the opinions of participants

the importance of the role of emergency paramedics in quickly transporting traffic accident cases to health facilities	Yes	No	I don't know
the paramedic must be trained to deal with all emergency cases and dangerous situations in traffic accidents?	95.6%	2.2%	2.2%
Can bystanders be used to assist the paramedic in treatment, such as controlling severe bleeding, holding the injured limb, calming the crowd, and organizing traffic?	73.3%	13.3%	13.3%
The paramedic must confront any emergency situation quickly and calmly. He must not put himself in any danger. He must declare upon his arrival at the scene that he is a trained paramedic. And if there are no doctors or nurses at the scene	80%	4.4%	15.6%
First aid procedures are the first steps that must be followed to care for the injured and injured in order to preserve their lives and thus mitigate the damage and disabilities?	93.3%	1.6%	5.1%

There is a study conducted in the Kingdom of Saudi Arabia in the city of Riyadh entitled (Emergency medical services in Saudi Arabia: A study on the significance of paramedics and their experiences on barriers as inhibitors of their efficiency) ⁽¹⁰⁾ in 2012, and concluded that Including nurses and doctors, therefore, this may reflect bias appreciation. However, the study provides room for more wide-ranging investigations involving different health opinions professionals over paramedics.

4. Conclusion:

The paramedic must be trained to deal with all emergency cases and dangerous situations in traffic accidents? 95.6%. The paramedic must confront any emergency situation quickly and calmly. He must not put himself in any danger. He must declare upon his arrival at the scene that he is a trained paramedic. And if there are no doctors or nurses at the scene 80%. First aid procedures are the first steps that must be followed to care for the injured and injured in order to preserve their lives and thus mitigate the damage and disabilities? 93.3%

It concluded that According to the opinions of the participants (their work is different, healthy and unhealthy), we find that everyone mentioned the importance of paramedics in transporting all dangerous cases (whether traffic accidents or other) in record time and with a very high degree of professionalism.

Acknowledgment:

To start with, I would like to Praise God and thank the researchers whose help me to complete this study, and who make the project come to light.

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