Impact factor: 4.28

GLOBAL JOURNAL OF NURSING, AND CLINICAL RESEARCH

ISSN: 3067-3275

12(1) 2025 GJNCR

THE GROWTH AND TRANSFORMATION OF PARAMEDIC SERVICES IN SAUDI ARABIA

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DOI: https://doi.org/10.5281/zenodo.15782154

Abstract: The EMS in Saudi Arabia has seen a number of positive changes, including the establishment of several university and college programmes dedicated to teaching EMS.

Methodology: The EMS Department has a tiered pre-hospital emergency medical services (EMS) response. The first week of training includes airway management training. Early exposure to BLS and ALS airway techniques allows for the greatest amount of procedural experience

Results: Emergency airway management is a critical component of critically ill patient resuscitation. The factors that contribute to this variation in success can be classified into three categories: system factors, patient factors, and paramedic experience.

Conclusions: The implementation of a widespread EMS system in Saudi Arabia will not only improve patient safety and clinical outcomes, but will also have a positive impact on the health of our communities, resource utilisation, and the economy.

Keywords: EMS, paramedics, paramedic's staff in Saudi Arabia, patient safety.

1. INTRODUCTION

The EMS is an essential component of the healthcare system because it is frequently the first point of contact for medical emergencies. Over the last decade, the EMS in Saudi Arabia has seen a number of positive changes, including the establishment of several university and college programmes dedicated to teaching EMS, the transformation of the profession from a post-employment first aid model to a pre-employment bachelor's degree model, generous governmental scholarship grants abroad, and the official accreditation of EMS as a profession. [1]

In Saudi Arabia, the EMS is the first point of contact for pre-hospital patients, and the SRCA 8 is responsible for providing pre-hospital care and transport. With a few exceptions, this responsibility applies to the entire country.[2]

Socio-economic and demographic factors of rural residents also account for some of the noted disparities in access and quality of EMS. For example, people living in rural locations have a higher risk of traumatic deaths when compared to urban settings and lower survival rates following out-of-hospital cardiac arrest. [3]

From densely populated urban areas such as Mecca and Riyadh to the northernmost rural areas EMS treats and transfers at Kingdom borders. More than 70,000 cases are referred to hospitals each year. which include the general public, the military, and the national Guard stations. Saudi Arabian EMS is SRCA is used to keep track of all hospitals and is completely free for citizens and residents of Kingdom. In general, the EMS team includes an emergency physician, paramedics, and other personnel ambulance drivers, technicians, and firefighters. [4]
Saudi Arabia's EMS system is better suited. The Anglo-American model, which includes ambulances staffed with Emergency Medical Technicians Emergency medical technicians (EMTs) and paramedics basic, intermediate, and advanced life skills support. They provide out-of-hospital care. consists of stabilisation, intervention, and transportation.[5]

2. LITERATURE REVIEW

EMTs have been compared to doctors. Surrogates at an accident scene. It has been mandated by United States legislation EMTs are required to work in both the United States and the United Kingdom. under the direction of a licenced physician, It has been suggested that EMS physicians / paramedics Medical directors must be experts in their fields. The practice of emergency medicine. The position of the medical director participation in pre-hospital emergency care educational and personnel settings certification, participation in protocol improvement acquisition and approval of technological standards, as well as monitoring and supervising medical orders. The field of emergency medicine.[6]
Saudi Council for Higher Education has recognised the EMI. The establishment of health specialties in 2002 was the first and only specialised institute in charge for EMS personnel education and training. [7]
In particular, prior study noted that longer ambulance response times are linked to this observed reduction in survival rates in rural areas. Underpinning all of these geographic discrepancies is a major workforce issue, with a noted preference of many EMS staff to work in urban centres as compared to rural areas.[8]

2.1 The role of the Saudi Red Crescent Society in the Kingdom:

The Saudi Red Crescent Authority (SRCA) is the country's national EMS provider, established by royal decree in 1963. It arose from a charitable aid society founded in 1953. The SRCA, on the other hand, became the 91st member of the International Red Crescent and Red Cross societies' league in 1966. The International Federation of Red Cross and Red Crescent Societies is a non-political organisation that aims to help the development of humanitarian activities by reaching millions of people affected by disasters, wars, epidemic and pandemic outbreaks of diseases, and providing first-aid. The SRCA headquarters are in Riyadh, and there are 13 administrative units spread across the country.[9]
Because the SRCA provides assistance to all other medical organisations in the Kingdom, one of its goals is to keep the system alert and ready for any emergencies that may arise at any time. Another goal is to collaborate with other Red Crescent organisations in cases of global disasters and wars without discrimination. The agency has its own practices to combat epidemic diseases in collaboration with medical organisations to vaccinate people and raise public awareness.[10]
The authority is classified as a governmental agency because the majority of its budgets are supported by the government, with the exception of private contributions.[11]
The Central Radio Communication Room (CRCR) gets emergency calls via different means, for example, through dialing the free 9-9-7 number or through the CRCR of the police, firefighting departments or car accident departments (CAD), or even sometimes patients come to the station by themselves.[12] It was identified that more than 70% of calls required transport for same victim and about one-fourth resulted in no victims being transported. Also Statistics from the MOH confirmed that more than 50,000 medical emergencies were transferred by bystanders and police vehicles instead of the SRCA ambulances. Therefore, the system has adopted an ALS model

in large cities of the country (Jeddah, Riyadh and Dammam) and assigned foreign physicians to work as EMS personnel and train the existing personnel in advanced prehospital care. And this resulted in enhanced quality of care as well as public trust inthe system. The CRCR staffs assign calls to a certain station based on the place where the call originates from and their judgment.[13]

3. METHODOLOGY

3.1 Training Hospital and System:

The EMS Department has a tiered pre-hospital emergency medical services (EMS) response, which is triaged by dispatchers based on the severity of the illness or injury. The average response time for basic life support (BLS) units is 3 minutes, and it is 5 minutes for advanced life support (ALS) units. Within the city, seven medic units and one medical services officer are always available; each medic unit is staffed by two paramedics. [14]

3.2 Overview of Paramedic Training:

HMC is home to the University of Washington's Paramedic Training Programme. Students in the paramedic training programme receive 2,200 hours of training over a nine-month period, which includes 400 hours of lectures, 100 hours of laboratory work, 600 hours of hands-on clinical work (e.g., emergency department, operating room), 800 hours of field internship, and 300 hours of formal evaluation.[15]

The first week of training includes airway management training. Early exposure to BLS and ALS airway techniques allows for the greatest amount of procedural experience. Students' first exposure to ETI begins with intensive manikin training supervised by paramedic instructors, emphasising laryngoscopy skills and overlapping with airway management lectures and skill laboratories.[16]

4. RESULTS

Emergency airway management is a critical component of critically ill patient resuscitation. The factors that contribute to this variation in success can be classified into three categories: system factors, patient factors, and paramedic experience. Paramedics are constantly challenged to gain adequate exposure to opportunities to perform this critical procedure and maintain this demanding manual and cognitive skill.

The posttraining evaluation revealed some improvements in donning and doffing personal protective equipment. The training programme received positive feedback from the participants.

Both paramedic students and EMS providers could benefit from the training programme. A positive educational environment was created because the main concerns were awareness and preparedness, which required human interaction.

The post training evaluation revealed some improvements in donning and doffing personal protective equipment. The training programme received positive feedback from the participants.

5. DISCUSSION

Development of prehospital systems, as well as hospital and public health policies. In Saudi Arabia, EMS has advanced as a specialty in its training programs and systems of care compared with other gulf countries. As Saudi Arabia continues to expand economically, the provision of EMS will soon begin to match more similar as emergency care as practiced in North American and other western countries. Also Saudi Arabian EMS system in future may get established as a benchmark for other Middle Eastern countries, to follow.[17]

Regular physical activity has been shown to help with disease prevention and improve health outcomes. Recent large-scale studies show that regular physical activity has a significant positive effect on a variety of aspects of overall well-being, including a reduction in mental health symptoms. Although it is clear that regular physical activity improves health outcomes across the population, the impact of shift work on access to regular physical activity is unknown, but it is likely to play a role in improving overall paramedic health.[18]

6. CONCLUSIONS

Through a comprehensive national plan that integrates the healthcare system and the ministry of interior system, the Kingdom of Saudi Arabia is capable of improving emergency medical services. Both systems are armed with highly trained personnel and cutting-edge technology. Annual healthcare expenditure demonstrates that resources are available, and the workforce can be trained to implement this plan.

The implementation of a widespread EMS system in Saudi Arabia will not only improve patient safety and clinical outcomes, but will also have a positive impact on the health of our communities, resource utilisation, and the economy.[19]

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