

Cardiac emergencies: How emergency nurses save lives.

David Hootman*

Department of Anesthesia, Trauma Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran

Introduction

Cardiac emergencies are among the most critical and time-sensitive cases that healthcare professionals encounter in the emergency department. The rapid and effective response to these emergencies can mean the difference between life and death for the patient. In these high-stress situations, it's often the emergency nurses who serve as the first line of defense, working tirelessly to stabilize and save lives. In this article, we will explore the pivotal role that emergency nurses play in managing cardiac emergencies and highlight their crucial contributions to patient care [1].

Understanding cardiac emergencies

Cardiac emergencies encompass a wide range of conditions that affect the heart and can lead to life-threatening situations. These emergencies include myocardial infarction (heart attack), cardiac arrest, congestive heart failure, arrhythmias, and many others. When a patient presents with symptoms such as chest pain, shortness of breath, dizziness, or loss of consciousness, emergency nurses must quickly assess the situation, obtain a detailed patient history, and perform a comprehensive physical examination.

Rapid assessment and triage

The initial assessment of a patient with a cardiac emergency is a critical step in determining the appropriate course of action. Emergency nurses must rapidly triage patients to identify those at the highest risk. They use their clinical judgment and training to assess the severity of the situation and to prioritize care accordingly.

For example, in cases of suspected myocardial infarction, emergency nurses will perform an Electrocardiogram (ECG) to assess the heart's electrical activity. This crucial test can help identify specific patterns indicative of a heart attack. Once a diagnosis is made, the nurse can initiate the appropriate treatment, such as administering aspirin, nitro-glycerine, or other medications to alleviate symptoms and stabilize the patient [2].

Administration of life-saving medications

In cardiac emergencies, timely administration of medications can be life-saving. Emergency nurses are well-versed in the use of drugs like epinephrine, atropine, and antiarrhythmic medications to manage various cardiac conditions. In cases of cardiac arrest, they play a central role in delivering

Cardiopulmonary Resuscitation (CPR), which involves chest compressions, airway management, and defibrillation, if necessary.

Advanced Cardiac Life Support (ACLS)

Emergency nurses are also trained in Advanced Cardiac Life Support (ACLS) protocols, which guide them in the management of complex cardiac emergencies. ACLS is a set of clinical interventions aimed at providing immediate and advanced care to patients in critical conditions, including those experiencing cardiac arrest, pulseless ventricular tachycardia, and other life-threatening arrhythmias.

ACLS algorithms provide clear and evidence-based guidelines for managing these emergencies, and emergency nurses are responsible for implementing them. This includes interpreting ECG rhythms, administering appropriate medications, and coordinating the efforts of the healthcare team. The ability of emergency nurses to stay calm under pressure and make critical decisions in a matter of seconds is invaluable during ACLS scenarios [3].

Patient and family support

In addition to providing medical care, emergency nurses play a vital role in offering emotional support to patients and their families. A cardiac emergency can be an overwhelming and terrifying experience for those involved. Nurses must communicate effectively, providing information about the patient's condition, the treatment plan, and what to expect during the stay in the emergency department. Supporting the patient's emotional well-being can also positively impact the overall outcome. A calm and reassuring presence can reduce anxiety and stress, which may exacerbate the cardiac condition. Building trust and rapport with patients and their loved ones is a key component of nursing care during cardiac emergencies [4].

Coordination with the healthcare team

Emergency nurses are not working in isolation; they are part of a collaborative healthcare team that includes physicians, respiratory therapists, and other specialists. Effective communication and coordination are essential in the management of cardiac emergencies. Nurses must relay critical information to the rest of the team, ensuring that everyone is on the same page and that the patient receives seamless care. The ability to work well under pressure and in a fast-paced environment is a hallmark of emergency nursing. They must

*Correspondence to: David Hootman, Department of Anesthesia, Trauma Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran, Email: hootmand@gmail.com

Received: 05-Oct-2023, Manuscript No. AAICCN-23-118679; Editor assigned: 07-Oct-2023, PreQC No. AAICCN-23-118679 (PQ); Reviewed: 21-Oct-2023, QC No. AAICCN-23-118679; Revised: 24-Oct-2023, Manuscript No. AAICCN-23-118679(R); Published: 30-Oct-2023, DOI:10.35841/aiiccn-6.5.170

adapt to changing circumstances, anticipate the needs of the patient, and make quick decisions in a high-stress setting.

Prevention and education

Emergency nurses also play a role in preventing cardiac emergencies by educating patients on risk factors and promoting heart-healthy lifestyles. They may provide guidance on diet, exercise, smoking cessation, and medication management for those with chronic cardiac conditions. Moreover, they may provide discharge instructions, emphasizing the importance of follow-up care, medication adherence, and lifestyle modifications. Effective patient education can reduce the risk of recurrent cardiac events and improve overall cardiovascular health [5].

Continuing education and training

The field of emergency nursing is dynamic, with new techniques and guidelines constantly emerging. To stay current and provide the best care possible, emergency nurses engage in ongoing education and training. They attend workshops, conferences, and advanced certification courses to ensure they are up-to-date on the latest evidence-based practices.

Conclusion

Cardiac emergencies are some of the most time-sensitive and high-stakes situations that healthcare professionals encounter. Emergency nurses serve as the front-line responders, using their clinical expertise, rapid decision-making abilities, and compassion to save lives. Their role in assessing and triaging patients, administering life-saving medications, and implementing ACLS protocols is crucial to the successful

management of cardiac emergencies. Beyond their clinical skills, emergency nurses provide emotional support to patients and their families, contributing to the holistic care of individuals in their most vulnerable moments. The dedication and competence of emergency nurses are instrumental in the fight against cardiovascular disease and the preservation of lives. Their tireless efforts are a testament to their commitment to the well-being of their patients and the importance of their role in healthcare.

References

1. Kandula M, Karthika P, Abraham R. Nurses Action towards Cardio Vascular Emergencies. *AJNER*. 2019;9(1):121-6.
2. Gilligan P, Bhatarcharjee C, Knight G, et al. To lead or not to lead? Prospective controlled study of emergency nurses' provision of advanced life support team leadership. *Emerg Med J*. 2005;22(9):628-32.
3. Cummins RO. Emergency medical services and sudden cardiac arrest: the "chain of survival" concept. *Annu Rev Public Health*. 1993;14(1):313-33.
4. Nori JM, Saghafinia M, Motamedi MK, et al. CPR training for nurses: how often is it necessary?. *IRCMJ*. 2012;14(2):104.
5. Hazinski MF, Markenson D, Neish S, et al. Response to cardiac arrest and selected life-threatening medical emergencies: the medical emergency response plan for schools: a statement for healthcare providers, policymakers, school administrators, and community leaders. *Circ Res*. 2004;109(2):278-91.