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NURSING TREATMENT FOR PATIENTS WITH AN ACUTE MYOCARDIAL INFARCTION SHOULD BE ORGANIZED INTO URGENT AND EMERGENCY SITUATIONS

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ABSTRACT

In many nations, including Pakistan, cardiovascular disease is the primary cause of mortality and the third most frequent cause of hospitalization. In order to accomplish its goals, the study in question used a qualitative and descriptive technique, conducting a literature review. Upon examination of the chosen discussion themes, twenty articles were found to be pertinent to the relevant elements under investigation. When compared to other heart disorders, which include myocardial infarction, angina, chronic ischemic heart disease with heart failure, sudden death, and heart attacks, coronary heart disease (CHD) was associated with a significantly higher death rate. In order to improve the standard of patient care for patients with cardiovascular diseases, this study, in brief, emphasizes the significance of appropriately utilizing SAE (Nursing Care Systematization) and the necessity of identifying and resolving irregularities in the nursing process in the workplace.

INTRODUCTION:

In many nations, including Pakistan, cardiovascular disease is the primary cause of death. It accounts for around 33% of all fatalities, half of which happen within the first two hours of an event, and 15% of which end in death before medical assistance is received. They also cause the third most frequent reason for hospitalization in the nation. Symptoms of acute myocardial infarction (AMI), a common form of cardiovascular disease, include sharp chest pain that may radiate to the arms and neck, stomach discomfort, shortness of breath, nausea, and heavy sweating. Acute MI is a condition in which the supply of oxygenated blood to the heart muscle is reduced or interrupted due to partial or total blockage of the coronary artery. Because of sedentary lifestyles, stress, and bad eating habits, as well as industrialization and technological advancements, the prevalence of AMI and other cardiovascular disorders has increased significantly. Excessive blood pressure, obesity, dyslipidemia, and smoking are among the factors that raise the risk and frequency of cardiovascular events (Motanya, 2020).

The nurse is essential to the early detection and effective treatment of AMI since she is frequently the first medical practitioner to contact patients in an emergency. Regarding the precise role that nurses play in this situation, there is a vacuum in the scholarly literature. Consequently, in order to close this gap and aid in the creation of optimal nursing practices for cardiovascular emergencies, this study analyzes the requirements and difficulties that nurses encounter when caring for patients with AMI. It is expected that the findings of this research will have a substantial impact on society, improving emergency care quality, lowering AMI-related morbidity and mortality, and promoting cardiovascular health in addition to influencing clinical guidelines and nursing education. In the populace at large. This study aims to provide a comprehensive understanding of acute myocardial infarction, including comprehensive considerations and the practical application of nursing care in this clinical condition (Guo et al., 2020).

It also highlights the critical role that nursing plays in coordinating care and procedures. The study describes how nursing care is systematized for patients with acute myocardial infarction in emergency and emergency units. The exact definition of the diagnosis of acute myocardial infarction, an investigation of the nurse's role in the care of AMI victims, and a focus on the nurse's mediation of the procedures and tests conducted are essential components of the path holistic approach, and follow-up protocols and care needs are some of the specific objectives. In summary, the goal of this research is to enhance nursing practice in emergency departments, particularly with regard to the care of patients suffering from acute myocardial infarction. In order to improve clinical outcomes and advance a more holistic approach to nursing, we aim to enhance the capacity of nursing professionals to offer efficient and all-encompassing care to patients by outlining the systematization of nursing care and investigating the pathological and practical aspects of this clinical condition (Abd-Elhai Abd-Elghani Shetaia et al., 2023).

METHOD AND MATERIAL:

Methodologically, a qualitative and descriptive approach was used to conduct a literature review for this study. A fuller comprehension of the subject at hand has been made possible by the critical analysis of the body of current literature. According to (Alkhaqani, 2022), in order to ensure the legitimacy of scientific investigations, it is crucial to base them on a trustworthy bibliography. In order to find publications published during the last six years, a search was therefore carried out in the following electronic databases: PubMed, Embase, Cochrane Library, and MEDLINE.

Research papers in English that were fully accessible and fully indexed in the databases above met the predetermined inclusion criteria. "Heart attack," "urgency and emergency," and "nursing care" were the search terms utilized. It's important to note that quote marks and the Boolean operators "and" and "or" were used to increase search efficiency (Haq et al., 2023).

A qualitative technique was used for this study in order to gather pertinent data to comprehend the issue at hand. (Oranga & Matere, 2023) Claims that unstructured, exploratory, and small sample-based qualitative research offers insights and comprehension of the problem's context. She goes on to say that qualitative research aims to comprehend better a social group or organization rather than attempting to portray it numerically. In conclusion, this study emphasizes how crucial a thorough and well-founded bibliographic review is to bolster scientific research, as it enhances the validity and coherence of the findings (Oranga & Matere, 2023).

RESULT AND DISCUSSION:

Taking into account the methodological controls used in this study's literature evaluation, pertinent articles were found in every database that was checked. Articles that did not fit the predetermined parameters or had no direct bearing on the subject of the analysis were excluded selectively (Abd-Elhai Abd-Elghani Shetaia et al., 2023).

Table 1 shows the quantity of research papers discovered in each database between November and December 2023.

Database	1st stage	2nd stage	3rd stage	4th stage
PubMed	41	22	12	5
Embase	126	9	6	5
Cochrane Library	152	17	13	2
MEDLINE	46	20	10	7
TOTAL	365	68	39	18

Apart from the articles that were excluded due to their lack of relevance to the main focus of the evaluation, those that displayed duplicity, that is, those that were discovered in several separate databases, were also removed, with just the initial entry from each database being retained. Sixteen research papers were found to be relevant based on the relevance characteristics related to the themes chosen for this work's integration. The authors looked at the role of nurses in treating patients with acute myocardial infarction on an emergency basis in light of all the evaluated data. Environment emphasizes how crucial the nurse's aptitude, skill, and competence are in identifying and handling these situations. Highlights that in order to improve the patient's health, lessen potential complications, and stop them from developing in the first place, this professional must promptly recognize the telltale signs and symptoms of AMI based on scientific and technical knowledge. They also have a responsibility to interpret the results of tests like enzymatic and electrocardiograms (Gillard, 2020).

According to (Bharadwaj et al., 2020), even in cases where the patient has been clinically stable throughout the medical history, there is a high mortality rate linked to acute myocardial infarction. This emphasizes the need to treat the patient as an emergency and give him priority because of his instability and propensity to severe complications. In order to stabilize the clinical picture and lower the risk of mortality, (Fathima, 2021) emphasize the significance of nurses in providing continuous care, making prompt decisions, and referring patients to facilities that offer more excellent assistance, such as the emergency room or intensive care unit. The inherent relationship between the risk classification and the patient's result controls the flow according to hospitalization guidelines and severity, highlighting the significance of early

detection in boosting survival rates (Gong et al., 2021).

Based on symptoms like dyspnea, cyanosis, chest pain, and pain radiating to the limbs, the Manchester protocol is used as a guide for classifying patients according to their risk. The author also notes that in addition to doing supplementary tests for analgesia, the nurse diagnoses AMI. The emergency stop trolley is used in the most severe cases, such as cardiorespiratory arrest and pulselessness. Cardiopulmonary resuscitation techniques and the delivery of medication for coronary reperfusion after that take place. The easiest method to identify a heart attack is with an ECG, which gives the nurse the ability to rule out or confirm an AMI suspect. This test's speed and ease of use enable it to be completed even as the patient is being transported to the emergency department, giving the team ample time to get ready to greet the patient and arrange a suitable intervention plan (Estévez-Loureiro et al., 2021).

In order to preserve cardiac function in patients with complete or partial artery blockage owing to thrombus, emphasize the significance of employing thrombolytics, such as alteplase, in the early hours of treatment. This lowers the mortality rate and myocardial damage. As a result, among other pertinent information, nurses must be knowledgeable about the use of these drugs, their side effects, drug interactions, and allergies. Acute myocardial infarction (AMI) is defined as necrosis of the heart tissue, which necessitates immediate medical attention. The condition presents with severe pain and a sense of impending death, frequently radiating to the left shoulder or arm, neck, or jaw. Other possible symptoms include nausea, vomiting, sweating, and stomach pain. Shows that when patients exhibit these symptoms, especially those who have already been admitted to the hospital and report having similar symptoms, hospital units must act promptly (Sanmartín-Fernández et al., 2021).

Accurately diagnosing AMI can be aided by modifications to tests like the ECG and myocardial enzyme testing. According to (Wang et al., 2024), AMI has a substantial influence on patients' and their families' lives, emphasizing the significance of initiatives targeted at enhancing quality of life and providing the initial care required to resume regular activities.

(Olanisa et al., 2023) Emphasizes how vital it is to identify the warning signs and symptoms of a heart attack so that medical professionals can be trained and treat patients more quickly and effectively. (Sorokhtey et al., 2024) Corroborate this information by pointing out that many hospitals have specialized protocols in place for the care of patients experiencing chest pain, with the aim of accelerating treatment. They emphasize the necessity for nurses working in triage to possess the necessary abilities in order to enable a seamless progression of care in emergency rooms (Almaqhawi et al., 2023).

The nurse must use a variety of strategies to maximize the patient's movement in emergency scenarios. The nurse's prior knowledge is essential for an early diagnosis and a better prognosis. Within the framework of AMI, they acknowledge that prompt symptom recognition aids in decision-making, stressing that the optimal window of opportunity for an EKG in patients experiencing chest pain is from 20 to 60 minutes following hospital admission. Determined the primary symptoms that nurses encountered when treating patients with chest pain, including, but not limited to, radiation to the jaw, chest pain, and epigastric pain. As noted (Zhang & Cao, 2024), nurses must provide prompt and efficient care when identifying AMI symptoms in the emergency department. When a patient presents with chest discomfort, a nurse's primary interventions are an ECG, cardiac monitoring, cardiac enzyme collection, and oxygen therapy administration (RACEAN et al., 2023).

According to (Liu et al., 2024), the use of evidence-based guidelines for patients with chest pain has increased care

efficiency. When a nurse first sees a patient in the emergency department, they must identify the patient's symptoms and act quickly to give the necessary care. Emphasize the vital role that nurses play in creating care plans and encouraging self-care, which calls for adaptability on the part of the patient and the medical staff. A nurse's active involvement and presence are crucial in fostering understanding about diagnosis and treatment and building connections with the patient and their family. Promoting self-care and guaranteeing treatment adherence need early patient and family involvement in the therapeutic process. (Mrozek et al., 2020) Assert that nurses are capable of handling a range of scenarios, including those involving intricate surgical procedures, and therefore have a leadership role in both treatment and strategic planning (El-Shaer et al., 2021).

In these situations, nursing care is essential for reducing the risk of post-operative complications and hastening the healing and release of patients. In addition, the nursing staff actively contributes to the development of systematic protocols aimed at averting complications and providing sufficient clinical care for AMI. The vital significance of the nursing staff is giving patients the finest care possible and understanding the need to have enough staff to guarantee that high-risk patients experience fewer difficulties. Planned care, adherence to guidelines, and systematized consultations can provide patients with increased safety and optimal treatment, leading to a quicker rate of recovery. According to (Chen et al., 2020), this position goes beyond a person's skill set. It includes managing the emergency cart, carrying out particular interventions or providing care for AMI patients, analyzing ECG readings, and team building exercises (Chioncel et al., 2020).

Consequently, from the moment of emergency department admission to hospital admission, the patient with AMI must get complete treatment, which includes any time spent in the operating room, recovery rooms, or other hospital areas as needed. Prioritizing patient safety is a crucial component of the nursing routine, which must be continuously prepared to suit each patient's unique needs, even though not all patients require all of the ways outlined (Wuche, 2022).

CONCLUSION:

It is evident from reading research on nurses' actions in treating patients suffering from acute myocardial infarction (AMI) in the emergency room that these experts' knowledge and abilities are vital to the early diagnosis, treatment, and management of these situations. The need to identify and act upon AMI's warning signs and symptoms quickly is emphasized as an essential step in promoting patient health, averting further difficulties, and delaying the illness's early onset. Furthermore, considering the high death rate linked to this illness, the patient must receive emergency care, even if they appear clinically stable throughout the collection of the patient's history. A systematic and flexible approach to identifying and directing the flow of care is made possible by the application of protocols based on scientific evidence, which helps to ensure a prompt and successful intervention.

When confirming or ruling out a suspected AMI, the ECG can be used quickly and practically, giving the team time to plan the best course of action in order to encourage self-care and treatment adherence; nurses are vital in advancing knowledge of the diagnosis and management of AMI. By actively engaging with the patient and their family, you can reduce post-operative issues and encourage a quicker, safer recovery. To summarise, the activities of nurses who adhere to protocols based on scientific data are critical in improving the outcomes of patients diagnosed with acute myocardial infarction (AMI). Assuring quality treatment and encouraging a quicker and safer recovery for AMI patients requires nurses to

prioritize patient safety and always be ready to fulfil their specific requirements.

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