# SYSTEMATIZATION OF NURSING CARE INDIVIDUAL WITH IMAM IN EMERGENCY SERVICE

SYSTEMATIZATION OF NURSING ASSISTANCE TO THE INDIVIDUAL WITH IMAM
IN THE EMERGENCY SERVICE

Wilson da Paixão Santos

#### Summary

**Goals:**Develop a proposal for the Systematization of Nursing Care (SAE) for patients with AMI in emergency services. **Methods:**This is an integrative review of the literature, which aims to gather and synthesize the results of research on the topic. This method allows you to gather knowledge on a given subject using several already published studies. And the process of preparing the integrative review requires six steps. **Results:** According to the search strategies, fifteen articles of Brazilian origin were identified with proposals for systematizing nursing care for patients with AMI. **Conclusion:** The Systematization of Nursing Care (SAE) allows you to map the process, as well as verify effectiveness, strengths and weaknesses, and risks.

**Descriptors**: SAE. IAM. Patient. Emergency. Assistance.

#### **A**hstract

**Objectives:**To develop a proposal for the Systematization of Nursing Assistance (SAE) for patients with AMI in the emergency services. **Methods**: This is an integrative literature review, which aims to gather and synthesize the results of research on the topic. And it is necessary for the process of elaborating the integrative review six steps. **Results**: According to the search strategies, fifteen articles of Brazilian origin were identified with proposals for systematizing nursing care for patients with AMI. **Conclusion:** The Nursing Care Systematization (SAE) allows to map the process, as well as to verify effectiveness, strengths and weaknesses, and risks.

**Descriptors**: SAE. AMI. Patient. Emergency. Assistance.

# 1. Introduction

Acute myocardial infarction (AMI) occurs with a reduction in the lumen of the vessel and the total obstruction of a coronary artery, by an embolus triggered by erosion or rupture of an atheroma plaque leading to myocardial ischemia, this artery has the function of irrigate the myocardial cardiac muscle, bringing nutrients and oxygen so that it can perform its physiological functions, with the reduction and cessation of this supply of blood flow, the cardiac cells of the myocardium suffer ischemia, generating necrosis of the cardiac muscle, thus characterizing AMI, this syndrome coronary heart disease has two types of angina, stable and unstable (MENEZES JUNIOR, et. al,2011). Stable angina is caused by

a transient obstructive process where the client will feel its manifestations after exposure to emotions and physical effort, it is a pain that has predictable frequency and duration, and can be relieved with nitroglycerin and rest, whereas unstable angina is more worrying because it is a process severe coronary obstructive disease, the pain is more prolonged than stable angina is not easily reduced due to the degree of impairment of ischemia, due to a thrombus full of platelets that is causing the blockage of the lumen of a specific coronary artery, caused by a rupture of a plaque of atheroma, the clinical manifestations being identical to those of stable angina, what differentiates it is that it remains even at rest and is more difficult to control (MENEZES JUNIOR, et. al, 2011).

This pathology causes the highest death rate in the world according to the World Health Organization, around 30% of the world population dies from this factor, with the biggest cause of death in Brazil being around 100 thousand deaths annually, in São Paulo the rate of specific mortality due to diseases of the circulatory system is 78.1 per 100,000 inhabitants (ROSA, et. al, 2016; OAK, et. al, 2016; BRAZIL, 2014; BRAZIL, 2011).

The main cardiovascular risk factors for this pathology can be divided into 2 modifiable and non-modifiable types, the unmodifiable ones are: Age, sex, family history, ethnicity, diabetes, high blood pressure, while the modifiable ones are: dyslipidemia, smoking, alcoholism, stress, sedentary lifestyle (PINK, et. al, 2016; BRAZIL, 2014).

The non-modifiable factor is very relevant for the occurrence of a coronary syndrome, but the addition of this factor, to the modifiable factors that can be well controlled such as diet, smoking, alcohol consumption, sedentary lifestyle can reduce the chances of an AMI occurring (BRASIL, 2014).

The classic clinical symptoms suggestive of a coronary syndrome are: compressive pain or retrosternal burning sensation that radiates to the left upper limb, jaw and neck, back or epigastric region, fatigue, nausea and vomiting, dyspnea, imminent death sensation, anxiety, cold extremities, skin pallor, sweating, hypotension or systemic arterial hypertension, muffled heart sounds and palpable precordial pulse (MENEZES, et. al, 2011; CASCALDI, et. al, 2014). Identification of these symptoms early, associating them with AMI, will drastically interfere with the quality of life and prognosis of this patient who has had a heart attack, minimizing possible sequelae or mitigating them (CASCALDI, et. al, 2014). The general objective is to develop a proposal for the Systematization of Nursing Care (SAE) for patients with AMI in the emergency department.

#### 2 Method

This is an integrative review of the literature, which aims to gather and synthesize the results of research on the topic. This method allows you to gather knowledge on a given subject using several already published studies. carried out through bibliographical research of an exploratory and descriptive nature. To carry it out, a survey of scientific publications related to the research topic was carried out. The inclusion criteria were: studies published in national periodicals in the Portuguese language, indexed in the VHL portal and SciELO magazine catalog, with full text available and published on the basis of 22 articles. The descriptors registered as search indexers were SAE; AMI and care for patients with AMI.

Based on the results obtained, we hope to verify which points need to be improved in the professionals' performance, in addition to raising new questions that contribute to future research. During the initial research, it was observed that the final sample could contain articles of different natures, which is why we opted for an integrative literature review, which provides a scientific basis for comparing studies of different natures.

To carry out the study, an electronic search was carried out in the LILACS databases (Latin American Literature in Health Sciences, SciELO (Scientifc Electronic Library Online), VHL (Virtual Health Library) and articles published in the period from 2015 to 2019, using the descriptors: risk classification, nursing, emergency. The data collection period was from June 2019 to January 2020. The criteria used for the bibliographic survey were complete articles, available in the aforementioned databases, in Portuguese. pre-selected and selected studies: the titles and abstracts of the articles retrieved in the search were read. Those that met the inclusion criteria were read in full.

As an exclusion criterion, articles in which the theme was not relevant to the objectives of the present work or articles with duplication of content were discarded. During the development of the work, after searching and selecting all studies, a thorough reading of all articles was carried out and some were transcribed in the discussion part with the aim of clarifying important points on the topic and others in the results demonstrating the results of more recent studies. recent in scientific literature. For analysis and synthesis of the articles, they were read, summarized and then similar contents were grouped into categories.

In the initial search, a total of publications were found, which were excluded because they were not in the established languages. By reading the titles and abstracts, it was possible to exclude

those in duplicate in different databases, studies that did not meet the inclusion criteria or the proposed theme. From these, articles were selected for summary reading, all available in complete form, at this stage duplicates were eliminated. Thus, of the 22 read in full, 19 answered the guiding question and, therefore, constituted the final sample of this review.

### 3 Results

Autores do artigo	Ano	Titulo	Revista	Resumo	Local/link do artigo
Ribeiro, Kaiomalox Renato Assunção; Da Silva, Ludmila Pinheiro; Lima, Maria Luzia	2017	O PACIENTE COM INFARTO AGUDO DO MIOCÁRDIO.	Artigo.	O infarto agudo do miccárdio deve aparecer nos próximos cinco anos como o responsável por mais de 40% de óbitos.	shttps://eventos.set.edv.br.s index.php.s.cie.s.article.s download>
Rodrigo Abreu de Vargas, Fernando Riagel, Nery de Oliveira Junior, Diego Silveira Siqueira, Maria da Graça Oliveira Crossetti	2017	QUALIDADE DE VIDA EM PACIENTES PÓS-INFARTO DO MIOCÁRDIO.	Revista Enferm. UFPE	Busca estratégias, para melhoria de qualidade de vida com pacientes pás _ enfartados .	<a href="https://periodicos.ufpe.br">https://periodicos.ufpe.br</a> <a href="mailto:cos.ufpe.br">costaerdemagem &gt; article &gt; download&gt;</a>
Tiago Tsunoda Del Antonio, Marcos Renato de Assis	2017	DUPLO-PRODUTO E VARIAÇÃO DA FREQUÊNCIA CARDÍACA APÓS ESFORÇO ISOCINÉTICO EM ADULTOS E IDOSOS	Rev. Bras.	House aumento do valor médio do duplo-produto em todos os pacientes acompanhados, porém sem significância estatística. A indicação do benho de aspersão nesta amostra foi segura.	<www.scielo.br 23n<br="" fbme="" pdf="" s="">5/1517-8692-rbme-23-05- 00394.pdf&gt;</www.scielo.br>
Cleivison José Barbosa da Silva, Monyque Évelyn dos Santos Silva, Fernanda Faria Reis, Gabriela Cristina Cliveira de Miranda, Luíz dos Santos, Dalmo Valério Machado de Lima	2016	BANHO NO LEITO DE INFARTOS: CROSSOVER DO CONTROLE.	aginA	E uma interversão de enfermagem, que tem como proposito promover higiene; Regulação técnica redução da microbiota , satisfação conforto e comodidade .E controle hidrotérmica 40°C (BL1) e a 42,5°C (BL2) .	Sobjecting of britished physical actions of the second particles of the sec
Cristiano Caveiaŭ, Renata Bassos dos Santos "Juliana Helena Mantezeli, Angelita Visentin, Christiane Brex, Vanessa Bertogilo, Camasseto, Antunes De Oliveira	2014	DOR TORÁCICA : ATUAÇÃO DO ENFERMERO EM UM PRONTO ATENDIMENTO DEHOSPITAL ESCOLA.	Revista de Enfermagem	A abordagem do Enfermeiro, no procedimento do paciente em dor terácica.	<a href="chitp://www.Revista.ulpe.bu/revistaenfermage">chitp://www.Revistaenfermage</a> >
Keila Maria de Azevedo Ponte, Lúcia de F.	2014	DE ENFERMAGEM A MULHERES COM INFARTO DO MIOCÁRDIO	Rev. Enferm. UERJ, Rio de Janeiro, 2014 nov./dez; 22(6):808-14.	Os cuidados de enfermagem, evidenciados neste estudo, que promoreram o conforto sociocultural foram: mostrar-se disponível para cuidar, promover carinho, estabelecer vinculo e confança.	<pre><https: article="" e="" index.php="" nfermagemuerj="" publicacoes.verj.br="" www.e-=""></https:></pre>
Thiago Enggle Alves, Maria Gracirene Silva, Lucido Clebeson Oliveira, Ana Cristina Arrais, João Evangelista Meneces Júnior	2014	ATUAÇÃO DO ENFERMERO NO ATENDIMENTO EMERGENCIAL AOS USUÁRIOS ACOMETIDOS DE INFARTO AGUDO DO MIOCÁRDIO	Rev enferm	No IAM, o eletrocardiograma pode demonstrar alterações do segmento ST e da onda T e, ainda, fornecer dados importantes como: taquicardia, bradicardia ou amitmia cardiaca 2,5 Durante a abordagem emergencial ao usuário que apresenta os sintomas e sinais cílhicos sugestivos do IAM, deve se realizada uma história organizada e sistematizada a fim de garantir uma assistência integral.	<a 51"="" article="" href="mailto://www.micke.pubmicke.pubmicke.pump.ami&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Dayane Caroline Carolino, Márcia Adriana&lt;br&gt;Días Meirelles Moreira, Mónica Lorena Días&lt;br&gt;Meirelles da Cunha, Francisco de Assis&lt;br&gt;Cavalcanti Neto, José Gomes Souto, Inson&lt;br&gt;José Almeida Medeiros Júnior&lt;/td&gt;&lt;td&gt;2013&lt;/td&gt;&lt;td&gt;A IMPORTÂNCIA DAS INTERVENÇÕES DE ENFERMAGEM&lt;br&gt;AO&lt;br&gt;PACIENTE COM INFARTO AGUDO DO MIOCÂRDIO.&lt;/td&gt;&lt;td&gt;Rovista Rocion.&lt;/td&gt;&lt;td&gt;O artigo relata que na decada de 1950 , houve mudanças nas&lt;br&gt;característica comportamentais e físicas dos pacientes pera&lt;br&gt;avallar a eficiência com a enfermagem.&lt;/td&gt;&lt;td&gt;&lt;a href=" https:="" recien="" view="" www.recien.com.brindex.php="">https://www.recien.com.brindex.php/Recien/article/view/51</a> .

## 4 Discussion

Known by many as a heart attack, acute myocardial infarction (AMI) is a process that occurs physiologically, leading to the death of part of the heart muscle, due to a lack of oxygen and nutrients, caused by a decrease in coronary blood flow.

Frequent manifestations are: persistent chest pain located over the sternal region radiating to the left arm and jaw, accompanied by dyspnea, palpitation, fatigue, vertigo, syncope or epigastralgia (CAVEIÃO et. al., 2014).

This decrease occurs due to silting in the artery, generally due to the formation of a clot in an area affected by atherosclerosis. Aiming for service

Fast and effective nursing assistance in caring for patients with acute myocardial infarction in the emergency room requires attention and, above all, knowledge to deal with the different types of situations that may be faced, so that the patient is well assisted and that this contributes to their recovery.

The taxonomy proposed by the North American Nursing Diagnosis Association International (NANDA-I) is one of the most used in hospital centers in Brazil and its application is divided into five interrelated, interdependent and recurring stages: patient history (anamnesis and physical examination), nursing diagnoses, planning, implementation and evaluation of the care provided (TANNURE, 2010).

The nursing team has been adopting to know all the patient's experiences, with the aim of getting to know them as a whole, so that care after a heart attack is more specific for each one, contributing greatly to their improvement.

Furthermore, according to Barretta; *et. al.*, (2017), the nursing care carried out by nurses is not restricted to the ICU, ranging from specific post-operative care actions to psychosocial care involving the patient and their families, to adapt them to the new reality and style of life, such as guidance on new post-operative routines, reduction of anxiety, fear and understanding of the limitations arising from the procedure.

The elementary actions and interventions carried out by the Nurse when caring for patients with Chest Pain are: electrocardiogram; cardiac monitoring; cardiac enzyme collection, oxygen installation; carrying out a brief history; capillary blood glucose; and large-caliber peripheral venous access puncture.

For nursing care to be effective, it is necessary to carry out the Systematization of Nursing Care (SAE) and the use of a taxonomy of nursing diagnoses (ND). Saints; *et. al.*, (2016), argues that:

To improve nursing care, it is necessary for professionals to seek forms of learning that qualify their performance and that are not limited to guidance from the organization. Furthermore, he cites scientific events, literature research and courses as sources of knowledge, as the more qualified the nursing professional is, the more effective the care he or she provides will be.

#### **Final considerations**

The study made it possible to understand the actions constructed by nurses in the urgency/ emergency sector when faced with a user with an Acute Myocardial Infarction (AMI). During the emergency approach to the user who presents symptoms and clinical signs suggestive of AMI, an organized and systematized history must be carried out in order to guarantee comprehensive and individualized assistance to the subject. Aiming for effective service

It is important that nurses and medical staff must be able to act efficiently in the face of a case of AMI, knowing how to identify the onset and paying attention to the typical signs and symptoms of a person with a heart attack.

In this way, the studies carried out conjecture for the accuracy of progress in health care for users with AMI, better quality and adequacy of the physical structure welcoming this subject and qualification of human resources inserted in this context, in order to minimize the consequences generated by AMI.

#### References

MENEZES JÚNIOR, J. E, et. al, Health education as a strategy to improve the quality of life of hypertensive users. **Rev rene.** 2011, vol. 12(esp), p. 1045-51.

ROSA S.A, *et. al*, Paradox of risk factors in the occurrence of cardiorespiratory arrest in patients with acute coronary syndrome. **RevBras Ter Intensiva.** 2016, vol. 28, no. 4, p. 405-412.

CARVALHO VCV, SILVA LCA, WERKHAUSER RP, MONTENEGRO ST, SILVA CGR, GOM AV, MORAIS CNL, MONTENEGRO SML. Assessment of the -174 G/C Polymorphism of the IL-6 gene in Acute Coronary Syndrome in Northeast Brazil.**Int J CardiovascSci.** 2016, vol. 29, no. 4, p. 288-294.

BRAZIL. Ministry of Health. IT department. **Datasus.** Health information [Internet]; 2014. Available at: http://datasus.saude.gov.br/noticias/atualizacoes/559-infartoagudo-domiocardio-e-primeira-causa-de-mortes-no-pais-revela-dados-do-datasus. Accessed on 21 April. 2017

BRAZIL.Ministry of Health.Department of Information Technology.**Datasus.**Health information [Internet];2011. Available at: http://tabnet.datasus.gov.br/cgi/tabcgi.exe?idb2012/c08.def . Accessed on April 19th. 2017

CASCALDI BG, LACERDA FM, RODRIGUES A, ARRUDA GV. Acute Myocardial Infarction from the Perspective of the Brazilian Population.**RevBrasCardiol.**2014, no. 27, v.6, p.409-417.

Silveira DS, Jaeger CP, Hatschbach L, Manenti ERF. Validation of the TIMI Risk Score for Acute Myocardial Infarction with ST Segment Elevation. Int J CardiovascSci. 2016;29(3):189-197 Alves, Thiago Enngle; Silva, Maria Gracirene; Oliveira, Lucídio Clebeson; Arrais, Ana Cristina; Junior, João Evangelista Menezes. Role of Nurses in Emergency Care for Users Suffering from Acute Myocardial Infarction. Digital Nursing Magazine, 2014. Available at: <a href="https://periodicos.ufpe.br">https://periodicos.ufpe.br</a> magazineenfermagem > article > download >. Accessed on: 23/11/2019 at 9pm.

BARUZZI, AC DO A.; STEFANINI, E. Acute Myocardial Infarction With St Supra, Thrombolysis Anywhere Medication Is Available.**Socesp Digital Magazine**, 2018. Available at: http://dx.doi.org/10.29381/0103-8559/20182804409-20. Accessed on: 11/27/2019 at 8:30 pm.

ANTONIO, TTD; ASSIS, MR de. Double-Product and Heart Rate Variation After Isokinetic Effort in Adults and Elderly. **Digital Nursing Magazine**, 2017. Available at: www.scielo.br/pdf/rbme/v23n5/1517-8692-rbme-23-05-00394.pdf. Accessed on: 10 Nov. 2019.

CARVALHO, DC; MOREIRA, MAD; CUNHA, MLD DA; NETO, F. DE AC; SOUTO, JG; JUNIOR, IJAM The Importance of Nursing Interventions. **DigitalNursing Magazine**. Available in:

https://www.recien.com.br/index.php/Recien/article/view/51 Accessed on 10 Nov. 2019.

CAVEIÃO, C. SANTOS, RB DOS; MANTEZELI, JH; VISENTIN, A.; BREX, C.; BERTOGLIO, V.; CAMASSETO, A. DE O. Chest Pain: Nurse's Role in an Emergency Department at a Teaching Hospital. **Digital Nursing Magazine**, 2014. Available at: <a href="http://www.revista.ufpe.br/revistaenfermage">http://www.revista.ufpe.br/revistaenfermage</a>. Accessed on: 10 Nov. 2019.

**12**.DBO, Guimarães; Rodrigues, TS; Oliveira, S.C.M.*et. al*.Electrocardiogram Door Time in Patients With Chest Pain in the Emergency.**Digital Nursing Magazine**,2018. Available at: https://doi.org/10.5205/1981-8963-v12i4a231123p1027-1036-2018. Accessed on: 10 Nov. 2019.

MEDEIROS, TLF DE; ANDRADE, PCNS DE; DAVIM, RMB; SANTOS, NMG dos. Mortality Due to Acute Myocardial Infarction. **Digital Nursing Magazine**, 2018. Available at: https://doi.org/10.5205/1981-8963-v12i2a230729p565-572-2018. Accessed on: 10 Nov. 2019.

PASSINHO, R.; SIPOLATTI, W.; FIORESI, M.; CANIÇALI, C. Signs, Symptoms And Complications Of Acute Myocardial Infarction. **Digital Nursing Magazine**, 2018. Available at: <a href="https://doi.org/10.5205/1981-8963-v12i01a22664p247-264-2018">https://doi.org/10.5205/1981-8963-v12i01a22664p247-264-2018</a> . Accessed on: 10 Nov. 2019.

PERTSEW, P.; PEROZIN, M.; CHAVES, PLLManagement of the Chest Pain Protocol in the Emergency Department.Brazil, 2018, 1st ed.

RIBEIRO, KRA*et. al,***The Patient With Acute Myocardial Infarction**. Digital Nursing Magazine, 2017. *Available at: https://eventos.set.edu.br>index.php>cie>article > download*. Accessed on: 10 Nov. 2019.

SANTOS,B. da S. et. al. Acute Myocardial Infarction: Approach With Nurses At A Coronary Intensive Care Unit. **Digital Nursing Magazine**, 2017. Available at: https://periodicos.ufpe.br/revistas/revistaenfermagem/article/download. Accessed on: 10 Nov. 2019.

VARGAS,RA DE; RIEGEL,F.; JUNIOR,N. OF O.; SIQUEIRA,DS; CROSSETTI, M. DA GO**Quality of Life in Post-Myocardial Infarction Patients**. Revista Digital 22.Enfermagem, 2017. Available at: https://periodicos.ufpe.br >revistaenfermagemarticle >download. Accessed on: 10 Nov. 2019.