

# The nurse's performance regarding in a hospital unit

# O desempenho da enfermeira relativamente a uma unidade hospitalar

DOI:10.34117/bjdv7n9-095

Recebimento dos originais: 07/08/2021 Aceitação para publicação: 01/09/2021

# José Henrique Rodrigues Machado

Doutorando em Performances Culturais - PPGPC. UNIVERSIDADE FEDERAL DE GOIÁS E-mail: jhenrique\_20@hotmail.com

# Gisele Marques Martins da Costa

Discente do 9° Período do curso de Enfermagem pela Faculdade de Filosofia e Ciências Humanas de Goiatuba - FAFICH E-mail: giselen022@gmail.com

## Patrícia Lemes Silva

Enfermeira Especialista em UTI, PUC Goiás E-mail: patricialemes03@hotmail.com

## **Evandro Barros Ribeiro**

Pós-graduado em Gestão Pública Faculdade Focus E-mail: evandroassessor@gmail.com

# Joaquim Domingos da Silva Neto

Mestrando em Administração Pública e Políticas Públicas Universidade Federal de Goiás – UFG E-mail: joaquimdsneto@hotmail.com

# **RESUMO**

A parada cardiorrespiratória (PCR) é definida como a interrupção das atividades respiratória e circulatória efetivas. A enfermagem tem papel extremamente importante no atendimento à PCR, que é indispensável o conhecimento teórico-prático da enfermagem. Este artigo é um estudo do tipo exploratório, bibliográfico com análise integrativa sobre a atuação do enfermeiro quanto ao atendimento à parada cardiorrespiratória em unidade hospitalar, uma reflexão sobre o preparo adequado do enfermeiro e a tomada de decisão na ocorrência de uma parada cardiorrespiratória (PCR). O objetivo do estudo é apontar os conhecimentos teóricos e as habilidades de enfermagem necessárias para a atuação do enfermeiro durante um episódio de parada cardiorrespiratória. Percebe-se, portanto, a necessidade do enfermeiro em promover educação continuada a toda sua equipe, visando o aprimoramento das ações voltadas para o atendimento de parada cardiorrespiratória na unidade hospitalar.

**Palavra-Chave:** Assistência, Enfermeiro, Tomada de Decisão, Parada Cardiorrespiratória, Ressuscitação Cardiopulmonar.



#### ABSTRACT

Cardiorespiratory arrest (CPA) is defined as the interruption of effective respiratory and circulatory activities. Nursing has an extremely important role in CPA care, which requires theoretical and practical knowledge of nursing. This article is an exploratory, bibliographical study with integrative analysis on the role of nurses in the care of cardiac arrest in a hospital, a reflection on the proper preparation of nurses and decision-making in the event of a cardiac arrest (CPA). The aim of the study is to point out the theoretical knowledge and nursing skills necessary for the performance of nurses during an episode of cardiorespiratory arrest. Therefore, it is clear that nurses need to promote continuing education for their entire team, with a view to improving actions aimed at caring for cardiac arrest in the hospital unit.

**Keywords:** Assistance, Nurse, Decision Making, Cardiorespiratory Arrest, Cardiopulmonary Resuscitation.

#### 1 INTRODUCTION

For (Silva et al., 2004; Venishi, 2003) cardiorespiratory arrest is the sudden and unpredictable suppression of cardiac and respiratory activities. And it boils down to the inadequacy of the resulting cardiac output and a scarce systolic volume for tissue perfusion resulting from the sudden interruption of ventricular mechanical action.

Myrtle (2007) explains that cardiorespiratory arrest is an event responsible for high morbidity and mortality and commonly occurs both at the hospital level and at home on any and all occasions.

> In Brazil, 160,000 people die annually from cardiorespiratory arrest, according to data from the Brazilian Society of Cardiology and the National Resuscitation Council. In the United States, the death toll rises to 340,000 a year, according to the American Heart Association; in Europe, 500,000 victims are recorded each year, according to the European Resuscitation Council (REVISTA COREN-SP, 2003).

According to Barra et al., (2011), at the time of a cardiorespiratory arrest, it is essential that the conducts performed are immediate, in order to restore the cardiac and pulmonary activities of the patient, in which the nurse's need to develop adequate cardiopulmonary resuscitation techniques (CPR) in order to succeed in the care of cardiorespiratory arrest.

Still Barra et al., (2011), an adult in a state of normothermia, inapproximately five minutes without care of CPR maneuvers can cause irreversible damage of neurons of the cerebral cortex, so the finding of a PCR in a patient should not be more than ten seconds.



Rocha et al., (2012) states that nurses are often at the forefront of a hospital environment, whether in an emergency room or in a medical clinic, which makes him one of the professionals who can first recognize the evolution of the patient to a cardiorespiratory arrest. Therefore, this professional should be able to activate the team for the resuscitation procedure. And it is up to the nurse to identify the pathologies and their particularities, as well as to improve the technical knowledge with scientific and encourage the integration of teamwork supporting continuing education.

However, Zanini and Barra (2006) say that the nursing class in general and in the face of some studies has shown that the vast majority do not have adequate preparation in the face of a cardiorespiratory arrest, deficit on a theoretical basis for the diagnosis of cardiac arrest on the monitor, the causes of CRP, the techniques used and medications during CPR.

However, Rocha et al., (2012) explains that for care to be efficient, it is essential that nurses are able to develop recurrent processes to severe emergency situations. In this case, the technical-scientific competence of the professionals and the accuracy of care records that support and follow the preparation of the emergency nursing team in cases such as PCR diagnosis are emphasized.

Barra et al., (2011) conclude that nurses perform functions that are essential in a hospital environment as well as the organization, composition, skill and correct division of measures to be applied at the time of CRP care, recognizing early and decreasing injuries, since it is the professional who is at all times providing adequate care to the patient. The nurse is the professional adapted to decide the necessary measures to be taken in the situation of a cardiorespiratory arrest, so it is extremely necessary that he has a theoretical-scientific basis.

It was in view of the concerns and doubts with the role of nurses in the care of cardiorespiratory arrest that the interest in researching this theme arose, because the professional and his entire nursing team must be able to recognize the condition of the patient with cardiorespiratory arrest, because this diagnosis is considered the most serious clinical emergency that occurs nowadays.

In this sense, the study is addressed to nursing professionals, because they are directly in contact with the patient and who often detect an episode of cardiorespiratory arrest, so they need to understand this event, the proposed study seeks to reflect on the conducts to be taken by the nurse and his team, analyze the nurse's performance in the face of cardiorespiratory arrest in an emergency room unit, to point out the scientific



technical knowledge and nursing skills necessary for action and decision-making during an episode of cardiorespiratory arrest.

This is a bibliographic study to achieve the proposed objectives.

The bibliographic study is based on structured literature, obtained from books and scientific articles from virtual libraries. The descriptive-exploratory study aims at the approximation and familiarity with the object-phenomenon of the research, description of its characteristics, creation of hypotheses and notes, and establishment of relationships between the variables studied in the phenomenon.

The presentsession was held from August to November 2013. Initially, scientific articles were surveyed on the proposed theme through the SCIELO, BIREME and LILACS databases, all indexed to electronic research, using the following descriptors: cardiorespiratory arrest; nurse's decision-making, nursing care in the face of CRP and cardiopulmonary resuscitation. Forty-five articles were found and read, of which 26 publications were selected because they were relevant and 19 were not used because they were not relevant to production. The selection criterion used was the choice of articles that most covered the proposed theme.

After exploratory reading and selection of the material, the analytical reading began, through the reading of the selected works, which allowed the organization of ideas in order of importance and synthesizing them that aimed to fix the essential ideas for the solution of the research problem. The aim of the study is to reflect on the nurse's performance in the face of an episode of cardiorespiratory arrest, the data presented were submitted to content analysis.

# 2 DEVELOPMENT

Venishi (2003) explains that cardiorespiratory arrest is one of the situations faced by nurses, regardless of their area of activity, because it is an emergency that can occur inany environment. In addition to being severe, cardiorespiratory arrest is decisive, as it requires immediate action from the nursing team. At this moment, the nurse's decision-making capacity is fundamental to ensure the patient's chances of recovery.

Cardiorespiratory arrest (CRP) is the sudden suspension of systemic circulation of useful and ventilatory ventricular activities in an individual with expectation of restoration of cardiopulmonary and cerebral function. Thus, cardiopulmonary resuscitation (CPR) is defined as a set of procedures after PCR in order to artificially maintain arterial blood circulation to the brain and other vital organs until the return of spontaneous circulationoccurs (GUIMARÃES, et al., 2008).



According to Bellan (2006), cardiorespiratory arrest is one of the episodes that occur at all levels of hospital care, and requires rapid action by health professionals, as it is common to find episodes that involve risk of death for patients and require interventions of small, medium and great complexity.

> In an Emergency Room Unit that, according to Brazil (1987) is a health facility designated to care for patients with or without risk of life and that diseases require immediate care, CRP is a situation of high occurrence, because the emergency room patient needs speed, resolution and efficiency in the identification of health problems (BRUNO; OLDENBURG, 2005).

According to Silva et al., (2001) the success in the care of patients in cardiorespiratory arrest requires the rapid and effective action of the nursing team, in order to minimize greater harm to the patient.

Silva et al., (2001) explains that it is the right of the nurse to be ahead in the absence of the medical professional, to decide to start the procedures to be performed during PCR, such as, airway clearance, ventilation through the ambros, cardiac massages and venous access, thus intervening the diagnosis of CRP, then the patient can return his vital signs, and then be assisted by the medical team.

Still Silva et al., (2001) also points out that it is important to plan together with universities and health units to build projects in undergraduate courses, extension and effective training, in addition to offering continuing education to professionals inserted in the labor market.

In fact, as Silva (1998) indicates, the "National Consensus on Resuscitation recommends that all hospitals perform specific and continuous training in Cardiopulmonary Resuscitation, as it is proven that the prognosis is directly related to the quality of care provided, emphasizing that their success is dependent on the dexterity and speed with which the maneuvers are applied".

# 2.1 NURSING NURSE'S ROLE IN THE CARE OF A CARDIORESPIRATORY ARREST (CRP)

According to Silva, M and Silva, F (2011) cardiorespiratory arrest is a severe diagnosis, which if not seen on time can cause high numbers of deaths, so the shorter the time for care by the nursing team performed, the greater chances of success.



Myrtle (2007) states that regardless of any area of activity the nurse is subject to an episode of cardiorespiratory arrest, since it is one of the most common emergencies, and may exist in any sector of a hospital.

For Libanês (2006) the nursing professional hasthe greatest participation during patient care, being responsible for it in a longer period of time, in which the professional has more opportunity to observe the factors predisposing to the development of a cardiorespiratory arrest and establish advanced life support maneuvers with the help of the nursing team in a synchronized way.

According to Ferrari (2005) it is the sole responsibility of the nursing professional to coordinate their team in the face of a situation of Cardiorespiratory Arrest, so it is expected that it has sufficient capacity to determine the actions performed by nursing technicians and auxiliaries.

According to Myrtle (2007)the nurse should be able to make possible emergencies and know the pathologies of the patient in severe situations, and it is extremely important to quickly evaluate the patient's clinical condition. Although, whenthe nurse is trained, he/she can perform this procedure in the emergency room with much more competence and speed.

Cintra et al., (2005) reveals that the nursing team must know the sequence of care, maintain a certain level of tranquility to be able to organize artificial ventilation and circulation maneuvers and gather the materials for necessary equipment.

Barra et al., (2011) state that basic cardiorespiratory resuscitation consists of a set of emergency procedures consisting of CABD, in which before starting the procedure it is necessary to:

Detect unconsciousness;

Request help and immediately start the maneuvers with the patient;

The CABD presents the following conducts or maneuvers:

1st- Initiate chest compressions;

2nd- Open airways;

- 3- Perform rescue vents;
- 4- Connect the defibrillator.

Silva (2006) explains that when nursing care the victim of cardiorespiratory arrest does not occur with quality, regardless of the reason, iatrogenies may occur that are understood as events that general some kind of damage to the patient's health, and may or may not be motivated by the failure of the nurse.



For Smeltzer and Bare (2005) the nursing professional should be attentive to the evolution of the patient. It is extremely important that in the emergency sector all patients are treated with potential, thus reducing infections, preventing and using standard precautions.

As the authors mentioned above, it is very important that nurses know how to coordinate their team, so that they can verify the control of vital signs, always making notes in the patient's medical records, and always communicating with the entire nursing team about the patient's clinical status.

According to Capovilla (2002)the role of the nurse together with the team of professionals, having the essential knowledge, providing quality care and a good integration can develop a well-oriented and competent care, thus giving greater chances to patients to recover.

Ferrari (2005) explains that it is up to the nursing professional to be a good player at the time of a cardiorespiratory arrest, because it is he who will be at the patient's side full-time, thus, training and continuing education in the face of cardiorespiratory arrest reflects in a nursing team qualified and synchronized to develop their functions.

## 2.2 DIAGNOSIS OF CARDIORESPIRATORY ARREST

According to Moreira et al., (2002) the diagnosis of cardiorespiratory arrest is characterized by abrupt loss of consciousness due to lack of adequate cerebral blood flow, leading to death in the absence of effective intervention. The brain has little glucose and oxygen reserve, and can maintain its activity for a period of 4 minutes after cardiac arrest, reinforcing the importance of initiating cardiopulmonary resuscitation maneuvers.

According to Knobel (2006) the essential clinical sign is the absence of pulse and breathing.

According to Collucci (2004) about 160,000 people die a year from CRP victims. As Matsumoto (2008) points out that this diagnosis depends on the monitoring of the patient's heart rhythm, when the nurse makes a brief recognition of this diagnosis, he improves the survival of this individual, from several modalities: Assistolia, Ventricular Fibrillation, Ventricular Tachycardia and through pulseless electrical activity.

According to Ferrari (2005), the main causes are toxic agents that are induced by central respiratory depression and paralysis of the respiratory muscle, in adults coronary disease is the main cause of CRP.

Pereira (2009) quotes:



Cardiac Causes: Myocardial infarction, dilated cardiomyopathy, systemic arterial hypertension, cardiogenic shock, episodes of atrial fibrillation (63%).

Extra cardiac causes: Polytrauma, hypovolemic and hemorrhagic shock, septic, snake bite, aspiration of gastric contents, hypothermia, asphyxia and toxic causes.

Hadi (2008) states that the recognition of Cardiorespiratory Arrest is a fundamental step in early treatment, that is, identifying the elements that determine the presence of a cardiorespiratory arrest.

Silva (2006) concludes, therefore, that the role of the nurse is of paramount importance, which can directly affect the final result regarding the patient's state, and it is correct to state that the rapid diagnosis of this professional is determinant for the success of the patient's care with cardiorespiratory arrest.

# **3 CONCLUSION**

After analyzing the studies, it was possible to conclude that CRP is a serious situation, in which the patient needs rapid and effective care. Thus, the nursing team has the role and responsibility to be able to attend cardiorespiratory arrest, to perceive the fastest signs and symptoms that precede a CRP, since the delay in care decreases the patient's chances of survival.

It makes evident the importance of the assistance of patientsin emergency situation thepatient of cardiorespiratory arrest, because it is these professionals who usually perform the first care topatients, thus starting early diagnosis and initiating the necessary procedures of a CPR, since the success in the care of patients in CRP requires the rapid and effective action of the nursing team, in order to minimize greater damage to the patient.

Thus, it is the role of nurses to associate theoretical and practical knowledge in the provision and care of the patient, thus performing appropriate emergency procedures quickly, in the case of CRP, since every minute is fundamental to save the patient's life.

Therefore, it is perceived the need of nurses to promote continuing education to their entire team, aiming at improving actions aimed at the care of cardiorespiratory arrest in the hospital unit. It is necessary to offer nursing professionals continuous training involving the theoretical and practical knowledge to be updated and the creation ofprotocols for the diagnoofcardiorespiratory arrest and assistance in cardiopulmonary resuscitation.



# REFERÊNCIAS

BARRA, V.P., BORGES.P.S., ALVES.L.D., ESPINDULA.M.B., VIEIRA.F.R. O papel do enfermeiro diante de uma parada cardiorrespiratória em ambiente de trabalho. Rev Elet de Enf. do Centro de Estudos de Enf. e Nutrição. Ago-dez 2011. P 1 a 9. BELLAN, M.C. Capacitação do enfermeiro para o atendimento da parada cardiorrespiratória. Campinas, SP. [s.n.], 2006.

BRASIL. Secretaria Nacional de Organização e Desenvolvimento de Serviços de Saúde. Terminologia básica em saúde: Centro de Documentação do Ministério da Saúde, 2ª ed. Brasília, 1987.

BRUNO, P.; OLDENBURG, C. Enfermagem em Pronto Socorro. Ed. Senac Nacional, 136 p. Rio de Janeiro, 2005.

CAPOVILLA, N.C. Ressuscitação cardiorrespiratória: uma análise do processo ensino/aprendizagem nas universidades públicas estaduais paulistas. Dissertação de Universidade Mestrado. Faculdade de Ciências Médicas. Campinas/UNICAMP (SP), São Paulo, 2002.

CINTRA, E. de A; NISHIDE, V.M.; NUNES, W. A. Assistência de enfermagem no paciente gravemente enfermo. 2.ed. São Paulo: Atheneu, 2005.

COLLUCCI, C. Cardíacos já têm pronto-socorro portátil, choque Controlado, Paulo. 2004. Disponível Cotidiano. Folha de São São Paulo. http://www1.folha.uol.com.br/fsp/cotidian/ff0310200401.htm. Acesso em: 10 set. 2013.

FERRARI, C.M.P. Parada cardiorrespiratória: ressucitação cardiopulmonar: aspecto de enfermagem. São Paulo: Atheneu, 2005.

GUIMARAES, H. P. et al., Ressuscitação cardiopulmonar: Uma abordagem prática. Revista Soc. Brasileira Clinica Médica. 2008; vol.6, n°3, pág: 94-104.

HADI, H. A. M. Crenças dos enfermeiros de unidades diagnósticas sobre o atendimento à parada cardiorrespiratória. 2008. F. 92. Dissertação (Mestrado em Enfermagem, área enfermagem do adulto); Escola de Enfermagem da Universidade de São Paulo: São Paulo.

LIBANÊS. Manual HOSPITAL SIRIO de Atendimento de **Parada** Cardiorrespiratória, Disponível em: Acesso em 12 set 2013. PIRES, M.T.B; STARLING, S.V; Manual de Urgências em Pronto Socorro, 8ºed; Rio de Janeiro: Guanabara Koogan, 2006.

KOBEL, E. **Terapia Intensiva: enfermagem.** São Paulo: Editora Atheneu, 2006.

MATSUMOTO, I. A Importância da Atuação do Enfermeiro Frente a PCR. São www.webartigos.com-articles-12453-1-A-Disponível em: HTTP: importância-da-atuação-do-enfermeiro-frente-a-PCR-pagina1.html. Acesso em: 10-09-2013.



MOREIRA, D. M; NETO, G. M; OLIVEIRA, M. W. et al., Estudo retrospectivo de sobrevida de pacientes submetidos a reanimação cardiorrespiratória em unidade de tratamento intensivo. Arquivo Brasileiro de Cardiologia. vol. 78 n.6, 545, 2002

MURTA, G.F. Saberes e práticas: Guia para Ensino e Aprendizado de Enfermagem, 3° Ed. Vol. 4. Pág: 271-272; São Paulo: Difusão, 2007.

PEREIRA, A. L. et al., Tratado médico de enfermagem. Vol 2. São Paulo: Editora Yendis, 2009.

REVISTA DO CONSELHO DE ENFERMAGEM DE SÃO PAULO - COREN-SP. São Paulo. n°48, nov/dez, 2003.

ROCHA, F.A.S; OLIVEIRA; M.C; CAVALCANTE; R;B. SILVA; P;C. RATES;H. Atuação da equipe de enfermagem frente à parada cardiorrespiratória intra**hospitalar**. Rev. Enf. Cent. O. Min. 2012 jan – abr, p. 141-150.

SILVA, A. R. D. Parada cardiorrespiratória em unidade de internação: vivências do enfermeiro. Ribeirão Preto: Escola de Enfermagem de Ribeirão Preto, SP, 2006.

SILVA, F.E.; SANNA, M.C.; NUNES, B. Tomada de decisão do enfermeiro frente a uma para cardiorrespiratória. Rev. Enf. UNISA, n°2, p: 26-30, São Paulo, 2001.

SILVA, F.J; SILVA, M.P. Assistência de Enfermagem frente à parada cardiorrespiratória. Rio de Janeiro; 2011. P. 07 a 32.

SILVA, LS, Pereira, SEM, Mesquita AMF. Procedimentos de enfermagem: semiotécnica para o cuidado, São Paulo: Medsi; 2004.

SILVA, S.C. Parada cardiorrespiratória na unidade de terapia intensiva. 1998. (Dissertação Mestrado). Escola de Enfermagem, Universidade de São Paulo, São Paulo.

SMELTZER, C.S; BARE, G.B. Brunner e Suddarth. Tratado de Enfermagem médico - cirúrgico. Rio de Janeiro: Guanabara Koogan, 2005.

VENISHI, E.K. Enfermagem médico cirúrgico em unidade de terapia intensiva. Senac, série apontamentos; Goiânia, 2003.

ZANINI, J.; NASCIMENTO, E.R.P.; BARRA, D.C.C. Parada e Reanimação Cardiorrespiratória: Conhecimentos da Equipe de Enfermagem em Unidade de Terapia Intensiva. Revista Brasileira de Terapia Intensiva. vol. 18 nº 2. São Paulo. 2006.