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THE NURSE IN THE ASSISTANCE OF BASIC LIFE SUPPORT AT CARDIORESPIRATORY STOP

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ABSTRACT

INTRODUCTION: In Brazil, cardiovascular diseases are the major causes of death among adults and the elderly. Cardiopulmonary arrest (CPA) consists of the cessation of activities of the heart, circulation and breathing, recognized by the absence of a pulse or signs of circulation, with the patient unconscious **OBJECTIVE:** To analyze the nurse's contribution in the assistance of Basic Life Support in Stoppage Cardiorespiratory. **METHODS:** The present study is a literature review about the assistance of nurses in cardiorespiratory arrest. The search for literary sources took place in October 2018, using only the online version in the database; SCIELO (Scientific Electronic Library Online); MEDLINE / BVS (Medical Literature Analysis and Retrieval System Online / Virtual Health Library) and LILACS (Latin American and Caribbean Literature in Health Sciences). **RESULTS:** The study showed that nurses, through their care, are an essential and trained professional to diagnose and attend a PCR. **CONCLUSION:** It is possible to observe that PCR is a serious situation that requires from the nursing team scientific knowledge that can be used quickly and systematically, as well as defined protocols and teamwork so that the assistance provided is as qualified as possible, since its recognition until post-PCR care; since nursing is responsible for the continuous care of the individual, therefore, this professional category is responsible for a significant part of all assistance provided to the PCR victim.

Keywords: Basic Support. Nurse. Cardiac Arrest

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INTRODUCTION

Cardiovascular diseases (CVD) are the leading cause of death in the world. Although not the leading cause of death in many low- and middle-income countries, 80% of deaths and 88% of premature deaths from CVD occur in those countries. With the control of infectious and maternal and child diseases, the increase in life expectancy and the growing urbanization, the importance of CVD tends to grow - especially in low and middle income countries. The implementation of health policies - among them, the encouragement of healthy lifestyle habits, access to primary and secondary prevention of CVD and the treatment of acute cardiovascular events - is, therefore, essential for the control of CVD in all countries¹.

The Cardiopulmonary Resuscitation-CPR process throughout history has always been based on unscientific experiments. It was from the 1960s onwards that the patient was observed in his bed and thus applied techniques with proven and scientific basis. In Brazil, its development occurred in the same period, through the doctor John Cook Lane².

Realizing the increase in mortality cases due to failures in the approach of health professionals and the delay in attending cardiopulmonary arrest (CRP); considering that nursing professionals are usually the first to approach patients in pre-hospital care (PHC), they need to have the necessary knowledge in approaching the patient, as well as knowing how to identify the signs to stop to intervene effectively⁴.

It is observed that, because nursing professionals are the first to identify patients who are in CPA, therefore, they need the need for updated knowledge, with international guidelines and well-developed skills, to provide care suitable⁶.

The nurse must provide training to his team in order to enable him to perform highly technical procedures in emergency situations, since such preparation is required for effective care. The professional must be trained in emergency

situations, in order to be able to act with all the necessary competence according to the severity of each case, taking into account that the patient has a few minutes to recover. Therefore, in order to act competently, it is necessary for nurses to carry out studies on the subject, seek as much theoretical - scientific information about cardiopulmonary resuscitation (CPR) and cardiorespiratory arrest (PCR) as possible^{6,2}.

Emphasizing the importance of the nurse to the patient in PCR. He needs to have emotional balance, theoretical and practical knowledge, mastery in the area, as well as the adequate classification of the team's functions by these professionals, being that they are predominant. Above all, the nurse needs to transmit security to the team, acting in an objective and synchronized way.

As the numbers of PCR have grown significantly, thus covering a larger number of people, there is a need for articulated interventions based on bibliographic reviews based on protocols.

The present study is justified by the fact that it addresses better knowledge about the nurse's performance in relation to pre-hospital care for patients in cardiopulmonary arrest and the approach of the functions performed by the same. Thus, the following study aims to emphasize the role of nurses in basic life support in cardiopulmonary arrest, aiming to stabilize and review the patient's clinical condition, thus increasing the patient's survival, playing a primary role in the care provided.

METHOD

It is an exploratory, descriptive study, ordered based on a literature review, which allows analyzing the articles already published that relate to the theme "the nurse in the assistance of basic life support in cardiorespiratory arrest". data was carried out in the period of October 2018, using only the online version in the database; SCIELO (Scientific Electronic Library Online); MEDLINE / BVS (Medical Literature Analysis and Retrieval System Online / Virtual

Health Library) and LILACS (Latin Literature American and Caribbean Health Sciences).

The inclusion criteria were: 24 original articles and magazines published between 2015 and 2018, available in full, which addressed topics such as: nursing, basic life support, basic life support, nurses in cardiac arrest, basic support of life and cardiorespiratory arrest, within all areas of nursing interest; published in Portuguese. Exclusion criteria: articles published in English and Spanish, incomplete text, case reports, editorials, thesis abstracts, dissertations, Course Conclusion Paper (TCC), epidemiological bulletins, management reports, official documents of national programs and international publications, books, publications that did not fit the established time frame and studies that did not answer the research question established initially.

After selecting the articles, a reading of the title and summary was performed in order to ascertain its relationship with the question that guides the present study. Studies found in more than one database were considered only once. Data analysis and interpretation were carried out in an organized and synthesized manner that included the following items: Year of publication, author, title of the work, research objectives, methods and techniques used and conclusion. The selected articles were analyzed in full and grouped.

RESULTS and DISCURSIONS

BASIC LIFE SUPPORT CONCEPT

The pre-hospital care service (APH) in Brazil, receives greater attention after the increase in demand is evident. Through Ordinance No. 2,048 of November 5, 2002, it regulates assistance to Urgencies and Emergencies, in the perspective of a first qualified care capable of minimizing sequelae and promoting maintenance and quality of life from the first service⁷.

The first assistance occurs in an immediate contact between the community and the health system, and is an assistance intervention by the

emergency system. For the conducts to be carried out in acute or critical cases, it will be up to this same system according to the protocols adopted by it, to carry out the evaluation of whether there is an urgency condition or not, and also to decide which is the best route for each identified need⁷.

Since 1993, it has been incumbent on ILCOR, through its working groups, to develop studies on various areas of resuscitation, including the BLS, in order to issue periodic evidence-based recommendations.

It is composed of representatives of resuscitation organizations from around the world, namely: the American Heart Association, the European Resuscitation Council (ERC), the Heart and Stroke Foundation of Canada, the Australian and New Zealand Committee on Resuscitation, the Resuscitation Council of Southern Africa, the InterAmerican Heart Foundation and the Resuscitation Council of Asia⁸.

The study period for the new practices adopted is every five years. Currently, the guidelines in force were published in Dallas in February 2015 and resulted from studies that have been carried out since 2010 on the application of the guidelines then recommended⁸.

With the implementation of SAMU in 1995, which took place through the term of technical cooperation with France. It made patient care based on two modalities: Basic Life Support (BLS) and Advanced Life Support (FAS). The BLS consists of the preservation of life, without invasive maneuvers, in which care is provided by people trained in first aid and who work under medical supervision. The nurse's activities are aimed at direct assistance in pre-hospital care in Brazil, being developed from the 90's, with the beginning of advanced support units⁹.

That has the following components in the BLS team: (Interventional Physician - regulator, nurse, nursing technician and the driver of an emergency vehicle Mobile Basic Support Unit). The Basic Support ambulance (TYPE B): it is a

vehicle intended for the interhospital transportation of patients with known risk of life and for the prehospital care of patients with unknown risk of life, unclassified with the potential to require medical intervention on site and or during transportation to the destination service⁹.

It is the exclusive responsibility of the nurse to care for patients at risk of death, in situations that determine immediate decision making. In this sense, Law No. 5.905 / 1973 instituted the Federal Nursing Council (COFEN) and its Regional Offices, which, as federal authorities, are responsible for the professional discipline of nurses and other professions included in nursing services¹⁰.

According to the AMERICAN HEARTH ASSOCIATION protocol, the resuscitation team must select a leader, for the best performance and organization during the assistance. Generally, the professional who assumes the position of leader is the nurse⁵.

CARDIORRESPIRATORY STOP PATIENT

In the last century, PCR was synonymous with death due to deficient knowledge in this type of care and, no more than 2%, survived. Currently, this survival rate exceeds 70% if care is performed early and efficiently. Studies indicate that survival, after a CRP, varies from 2 to 49% and that these values are directly related to the initial heart rate and the early onset of cardiopulmonary resuscitation (CPR). Knowing that the actions taken during the initial minutes of attending an emergency are crucial to the victim's survival⁶.

The survival of patients undergoing CPR, a category that involved the largest number of articles, proved to be a current concern of researchers in the field of in-hospital PCR. In this environment, the results of CPR are not always satisfactory, due to the predominance of patients with many comorbidities. These patients differ from those managed in the extra-hospital environment, and it is important to know the characteristics that interfere with the results of

CPR maneuvers within the hospital. On the other hand, the occurrence of CRP is more common in the prehospital environment and about 50% of patients with acute myocardial infarction do not arrive alive at the hospital^{5,8,9}.

Survival to hospital discharge, despite advances in CPR, is still very small, around 14%, with no changes in the last 30 years. In a study that analyzed the effectiveness of CPR in a general adult Intensive Care Unit (ICU), it was observed that, despite the adequate initial management of patients, survival to hospital discharge was equal to zero. Despite this, the view that each patient is a unique being that, by itself, has a 100% representativeness cannot be lost. Thus, each successful CPR, each life saved, should provide us with encouragement, even if that patient is the only survivor among many others who have not reached this condition⁴.

It can be caused by four alterations in the cardiac rhythm: ventricular fibrillation (VF) or pulseless ventricular tachycardia (VT) (rhythms that deserve immediate shock determining about 73% of reversion, provided that the defibrillator is used in the first 3 to 4 minutes PCR) or asystole rhythms or pulseless electrical activity (rhythms that should not receive defibrillation¹².

However, once these conditions are verified, cardiopulmonary resuscitation (CPR) maneuvers should be initiated shortly, as the brain cannot support hypoxia for more than 5 minutes at the risk of suffering irreversible injuries. The identification of the rhythm and the clinical history of the patient allow a procedure without wasting time, since quick actions are necessary.

ROLE OF NURSES IN CARDIORRESPIRATORY STOP

The nurse's role is to coordinate the nursing actions that will be carried out during the CPA, as it is he who will lead his entire team. Advanced life support uses appropriate equipment for better oxygenation and ventilation associated with the use of medications. It is the nurse's job to carry out the checklist of the PCR

cart and to check the functioning of the equipment such as monitor, defibrillator and ventilator, in order to avoid iatrogenesis. Thus, the need for professionals to be up-to-date and trained for this type of service is extremely important³.

In the assistance provided to these patients, it is necessary to use interventions and a set of procedures that must be performed accurately and quickly, performed by the medical and nursing staff. Thus, patients in CPA end up generating a mobilization among professionals, often generating a moment of stress, as saving the life of the other is a collective challenge^{7,8}.

The nurse must establish and have knowledge about basic life support (BLS) and advanced life support (VAS) in a situation of maximum emergency, in order to define the victim's survival. It is emphasized the need for constant training for the theoretical and practical updating of nurses in performing CPR according to the guidelines of the American Heart Association, which periodically discloses the evidence that underlies the changes related to CPR^{3,1,9}

The cardiopulmonary resuscitation procedure is a complex process that involves several factors. Among them are the nursing team and their coping, one of which is the experience or not to be working during a CPA, so regardless of the experiences, the team must be prepared to face the situation^{10,8}

The nurse is largely responsible for caring for these victims, but not everyone knows how to act. It is therefore necessary that professionals seek improvement through permanent education, training, as well as understand the technical, ethical and social commitment.

CONCLUSION

It is possible to observe that PCR is a serious situation that requires from the nursing team scientific knowledge that can be used quickly and systematically, as well as defined protocols and team work so that the assistance provided is as qualified as possible, right from the start. recognition to post-PCR care; since nursing is

responsible for the continuous care of the individual, therefore, this professional category is responsible for a significant part of all assistance provided to the PCR victim. Nurses' attitudes and behaviors can influence the team's speed and level of involvement in the various emergency situations that include episodes of CRP.

The role of the nurse is indispensable for direct nursing care of the patient at the APH, it is necessary to provide permanent education for the entire team, as well as the establishment of standard protocols to standardize the team's actions with a view to increasing survival and health. people's quality of life.

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