

Case Report





# Performance of nurses in mobile prehospital care

#### **Abstract**

Brazil, assistance to the emergency services provided ensures early care for users of the Unified Health System (SUS) and safe transportation to points of care in the hierarchical network. In this service, the nurse plays an important role and has an active participation when collaborating for quality care, preventing complications, assessing potential risks and leading to safe care. Objective: dwrite the actions of the emergency nurse and work in advanced health support in the mobile PHC, through a review of the national scientific literature. Method: This is an integrative review with a qualitative approach that aims to identify and characterize the aspects addressed in studies that are related to the role of nurses in mobile pre-hospital care.

Results and discussion: In view of the analysis of the production of these seven selected articles that address the role of nurses in mobile PHC, as shown in the table below, it resulted in four categories: role of nurses in advanced life support (VAS), training of professionals, development of health protocols attendance, management and supervision of activities, discussed below. Of the seven articles contained in the sample, 100% of them address the role of nurses in VAS; performance of the protocols that was mentioned in only 1 of the articles (14.28%); 1 (14.28%) addressed the theme in which the sample is made refer to professional training and only 2 (28.57%) address the topic of management and supervision of activities.

**Conclusion:** It is expected that the present study will contribute to new research, leading to a reflection on the importance of nurses in pre-hospital care services (PHC), valuing health professionals and thus guaranteeing patient safety and qualityofcareprovided in healthservices.

**Keywords:** nurse, samu, pre-hospitalcare

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**Abbreviations:** PHC, pre-hospital care services; SUS, unified health system; NP, nursing process

#### Introduction

Assistance to victims at the emergency site in Brazil is as old as in other countries. The Senate of the Republic, in 1893, passed a law that intended to establish emergency medical assistance on the public road in Rio de Janeiro, which at the time was the country's capital. In 1899, the Fire Department of the same location put in action the first ambulance, powered by animal traction, to perform the referred service.

In Brazil, assistance to emergency services ensures early care for users of the Unified Health System (SUS) and safe transportation to points of care in the hierarchical network. In its configuration, it has a team composed of the service coordinator, responsible nurse, responsible physician, regulatory doctors, interventionist doctors, drivers, nursing assistants and technicians, nurses, radio operators and auxiliary medical regulation telephone operators.<sup>2</sup>

The Mobile Prehospital Care (APHM) is configured, within the national scenario, as an important tool to ensure survival and minimize the sequelae in people victims of health problems, whether they are traumatic, psychiatric, clinical, obstetric, pediatric, etc.<sup>3</sup>

The APH comprises the initial actions taken in a short period of time by the rescue team at the place where the health problem occurs, be it traumatic, clinical or psychic. The removal of victims safely and with life support to a referral hospital care center has now become indispensable. As nurses are inserted in this scenario, they encounter several challenges related to the operationalization of the service and their personal/professional training.<sup>4</sup>

According to ORDINANCE NO. 1,864, OF SEPTEMBER 29, 2003 all pre-hospital care and any assistance performed, directly or indirectly, outside the hospital environment, using available means and methods. This type of assistance can vary from a simple medical advice or guidance to sending a basic or advanced support vehicle to the place of the occurrence where there are traumatized people, aiming at maintaining life and minimizing sequelae. In Brazil, the system is divided into mobile and fixed services. The mobile APH, the object of this reflection, has the mission of providing immediate assistance to victims who are referred to thefixed APH orto hospital care.

In general, the nurse's work at the APHM became more evident in 2003, with the implementation of the Mobile Emergency Care Service (SAMU) with the Advanced Support Units (USA). In this service, the nurse plays an important role and presents an active participation when collaborating for quality care, preventing complications, assessing potential risks and leading to safe care.<sup>1</sup>

According Luchtemberg,<sup>5</sup> thethe process of nursing care in Mobile Pre-Hospital Care (APHM), consists of diversified care actions. It should be noted that direct patient care prevails, which can range from the assessment of the scene of the occurrence to the performance of various procedures. In this scenario, the nurse provides assistance with a focus on the patient's needs, with priority nursing interventions and continuous reassessment during the patient's transportation.

It is noteworthy that among the important competences for the exercise of nursing practice at the APHM, is the implementation of the Nursing Process (NP) determined in the Resolution of the Federal Nursing Council (COFEN) No. 358/2009, which provides for the Systematization of Assistance Nursing and the implementation of NP in environments, public or private, in which nursing care occurs. The NP that allows nurses to participate in the patient's assessment, which strengthens their performance with professional autonomy.



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Nursing since the beginning has been focused on the issue of quality in health, since the time of Florence Nightingale. Currently, in a globalized world, Nursing is developed as a profession with a focus on quality of care, through the measurement and evaluation of the components of structure, processandresultofcare.<sup>6</sup>

The existence of gaps in the training of nurses, combined with the difficulties presented by nursing students in relation to theory and practice in situations involving human frailty, personal preparation, the legal profile necessary to work in the PHC and the need for trained professionals motivated researchers for this study.<sup>4</sup>

Therefore, this study aims to providewrite the actions of the emergency nurse and work in advanced health support in the mobile PHC, through a reviewofthenational scientific literature.

Regarding the relevance of this subject, it is justified given the importance of the urgency and emergency area in the context of reduced morbidity and mortality, through primary care at the place of occurrence by a multidisciplinary team, focusing on the quality of care provided by the nursing team, on the need for professionals capable of acting who have autonomy and seek their space when using their knowledge, in an attempt to break the dichotomy between what is recommended and what is performed in the daily life of nursing, collaborating for the planning and organization of practice and assistance.

## **Materials and methods**

It is an integrative review with a qualitative approach that aims to identify and characterize the aspects addressed in studies that are related to the role of nurses in mobile pre-hospital care.

To guide this study of integrative literature review, a formal and rigid work structure was included. the Virtual Health Library (VHL) database was used, which contains publications from Health Sciences in general sources, such as: Latin American Literature in Health Sciences (LILACS), International Literature in Health Sciences (MEDLINE) and Scientifc Electronic Library Online (SCIELO) and also specialized areas such as the Bibliographic Database in the Nursing Area of Brazil.

Articles of interest for the research were included, that is, those that made reference, in their data, using articles from the period 2010 to 2020. The search revealed 22 publications, databases were carried out in June 2020, using the keywords: nurse, Samu and pre-hospital. After the analysis resulted in 7 articles about the topic, called anchor - related specific text segments, which justified the proposed theme.

## **Results and discussion**

In carrying out this research, 7 scientific articles were selected, their results were presented in two stages: the first stage comprised the characterization of the articles and the second, the actions of the nurse of the emergency nurse and performance in the advancedhealthsupportofthe mobile PHC (Table 1 & 2).

Before analyzing the production of these seven selected articles that address the nurse's role in the mobile PHC, shown in the table below, resulted in four categories: role of the nurse in advanced life support (VAS), training of professionals, elaboration of care protocols, management and supervision of activities, discussed below (Table 3).

With the studied sample it generated thefollowing categories which are discussed below:

Table I Distribution of search on Lilacs by keywords, search, exclusion, selectionandreading, 2020

Latin American and Caribbean Health Sciences Literature (Lilacs)						
Keyword	Search	Exclusion	Selection	Reading		
SAMU X Nurse	2	I	I	I		
Prehospital X Nurse	10	6	4	4		
Nursing diagnoses in prehospitalcare						
	4	1	1	1		
Total	16	8	6	6		

Source: Prepared by the authors based on the research data

Table 2 Scielo search distribution using keywords, search, exclusion, selectionandreading, 2020

Scientifc Eletronic Library Online(SciELO)						
Keyword	Search	Exclusion	Selection	Reading		
SAMU X Nurse	1	1	0	0		
Prehospital X Nurse	4	3	1	1		
Nursing diagnoses in prehospitalcare						
	0	0	0	0		
Total	5	5	5	1		

Source: Prepared by the authors based on the research data

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Table 3 Distribution of scientific articles according to the year of publication, the author, the journal, the title of the article and the thematic category of study, 2020

Year	Author	Period	Title	Category
2012	Vanessa Luciana Lima Melo de & Avelar <sup>7</sup>	Rev. bras. nursing	Identity configuration of nurses in a mobile emergencycareservice	-Nurse's performance in the FVO
2014	Andrea Bernardes <sup>8</sup>	Rev. electronicsEnfer	Supervision of nurses in mobile pre-hospital care	-Management and supervision of activities;
				-Nurse's performance in the FVO
2017	TayrineYpuena Tavares	Rev. Enfer. Min West	The daily lives of nurses working in the mobile emergency care service	- Nurse's performance in the FVO
2017	Daniel da Silva Grenadie	er,	Precarious work in mobile emergency care services: repercussions for workers' health	-Management and supervision of activities;
				-Nurse's performance in the FVO
2018	Paulo Sergio Quevedo Peres	Online magazine ofresearchcareisessential	Nurses' performance in an attendance service	- Nurse's performance in the FVO
			private prehospital	
2019	Mauro Mota	Nurse Focus	Pre-nursinginterventions	- Nurse's performance in the FVO
			Hospital: narrative review	- Elaboration of protocols of
				attendance
2019	Marisa Aparecida AmaroMalvestio	Nurse Focus	Nursing in Advanced Practices in pre-hospital care: Opportunity to expand access in Brazil	-Nurse's performance in the FVO
				- Capacity building of re
				human courses

#### Nurses' performance in advanced care support (VAS)

With the implantation of nurses in the mobile PHC, it occurred through the national emergency care policy, based on the French model, which has different categories in the composition of the team. In the VAS, the ambulance is manned by a first-aid driver, doctor and nurse, characterized and activated by medical regulation for clinical, traumatic, surgical and psychiatric disorders, which require complex interventions.7

Nurses stand out as key players in the different contexts of health work, including SAMU. Nursing work is essential for health care at the institutional level. These professionals have technical responsibility for the work of the nursing team and their work requires technicalscientific competence with permanent updates.9

Health institutions have also sought "multi-skilled and multifunctional" nurses who master the language of computers and high-tech machines, are quick-witted, have initiative, are creative, competitive, communicative, master other languages, in addition to having leadertraittoformqualifiedteams.<sup>5</sup>

It is regulated by the Federal Nursing Council (COFEN), through Resolutions no 577/2018, which provide for the presence of nurses in Pre-Hospital and Inter-Hospital Care, in situations of known or unknown risk, which ensures nurses with specialization the right to register your certificate with the Regional Nursing Council of your jurisdiction, conferring legality to actaction in the specific area of professional practice.

At SAMU, nurses perform coordination and continuing education activities and provide direct patient care in advanced ground or air support units. In the basic support units, there are nursing technicians who develop assistance of less complexity.5

Of the seven articles contained in the sample, 100% of them address the role of nurses in VAS, according to Adão (2012) the participation of nurses in the ambulance for advanced life support. Given the importance of providing assistance with skills and scientific knowledge that produces positive prognoses in relation to the victim's recovery, nurses and doctors must have a theoretical basis and skills backed by legislation that allow invasive respiratory and circulatory intervention, among others aimed at stabilizing and recovering the victims served.

#### Elaboration of service protocols

The presence of a nurse is of fundamental importance in direct assistance to victims, in the technical training of teams, in the elaboration of care protocols and didactic material and in the supervision of staff. Provides faster, organized, safe and quiet service, being considered a point of support for teams.<sup>4</sup> According to Bernardes,8 in his research nursing assistants highlighted the importance of creating protocols that guide them and that standardize

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the provision of care in certain situations. However, they explain that often, in situations of urgency and emergency, what is standardized gives way to improvisation. In these situations, they report that they miss a nursing supervision to guide them on how to act and, not only are they lacking this supervision, but they have difficulty accessing coordination and technical leaders.

Each institution can have its own protocol for its team, as long as it guarantees a quick assessment, thus allowing less time spent on service, efficiency and minimal possibility of errors. For this, it is necessary that in its content interventions and stabilization of the respiratory, circulatory and neurological states are present, followed by immobilization, fast and safe transport to the nearest appropriate hospital.1

The accomplishment of the protocols that was mentioned in only 1 of the articles (14.28%), thus verifying the lack of information on the theme, is understood as a guidance based on the standards and realities of each institution, whose objective is to provide support, agility, in addition to optimizing the care provided, free of risks to the patient.

#### **Professional training**

With this increase in the attendance of patients victims of multiple trauma, advanced emergency units were created, where it is an ambulance with more resources and more professionals trained to provide quality care. Urgent and emergency nurses were also trained, who are professionals, with scientific technical knowledge so that they can perform a more appropriate care for each type of trauma.5

A study, carried out at SAMU in São Paulo, analyzed the knowledge necessary for nurses to work at the PHC. The results indicated that the knowledge recommended in Ordinance No. 2048/02 of the Ministry of Health is basic. They considered essential theoretical updates, development of technical skills, decision making, readiness, dexterity and knowing how to act in situations of high stress, or with a specific population, which indicates the need for specific training programs for pre-hospital care.4

Training, training and exchange of experiences must go through a process of reflection and self-analysis, whose action promotes the problematization of the reality experienced and which, in turn, will need to be worked on and transformed by the entire team that is part of the program. service. One of the contributions that education brings into the service is undoubtedly the opportunity to improve competences and skills in the face of different operational and existential situations that require prior and updated knowledge. 10

As it is a relatively new area in nursing practice, little was approached by the journals chosen for analysis, only 1 (14.28%) addressed the theme in which the sample is made refer to professional training as essential to quality care.

#### Management and supervision of activities

The team of health professionals must be composed of: service coordinator, technical officer, responsible for nursing, regulating doctors, interventionist doctors, nursing assistants and nursing assistants and technicians. The nurse must be a professional duly legalized before his supervisory board, qualified for specific nursing actions, having as assignment in the mobile APH assistance to patients who demand high complexity, in addition to providing operational and administrative services.1

Management implies the organization of health services, making decisions that affect the structure, the production process and the

product of a system, in order to enable the means to provide assistance to the customer with efficiency, effectiveness and effectiveness. The nurse's work process, however, consists of two complementary dimensions: managerial and care. In the first, the nurse takes as an object the organization of work and human resources in nursing. In the second, the nurse takes the nursing care needs as an object of intervention.7

However, nurses must understand how complex and important their role as a supervisor is in a Mobile Pre-Hospital Care team. You should also understand that this supervision includes, in addition to the search for qualification, the recognition of its importance. Thus, it is not enough for nurses to master the technical competence for supervision, it is essential to understand people and groups, the importance of working relationships in the team as a whole, so that supervision is a qualifying instrument for nursing practice.8

Of the selected articles, only 2 (28.57%) address the theme of management and supervision of activities, thus understanding the nurses present in these services as facilitated and motivated to seek better care and patient safety. 11-14

#### Conclusion

With this article it can be seen that nursing has been increasing its field of action in recent years and with that it can be evidenced the creation of quality control measures and prevention of events through guidance and health education to the training of professionals engaged in the pre-hospital care system.

They characterize the APH as a Service that requires professional capacity, general and specific knowledge, mastery of techniques, pathologies, protocols, leadership skills, management and emotional balance.

It is known that supervision should involve encouragement, guidance and help to staff, providing the team with a rethink of their roles and attributions, taking care production as a reference and aiming to achieve efficiency in nursing work.

The research has its relevance in future perspective for i am proving the assistance of health professionals, especially the nursing team, the new demands of the health zmarket, which seeks quality care at a low cost, thus making health organizations look for ways to adapt to this new demand.

It is expected that the present study will contribute to new research, leading to a reflection on the importance of nurses in pre-hospital care services (PHC), valuing health professionals and thus guaranteeing patient safety and quality of care provided in healthcare services.

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## **Conflicts of interest**

The authors declare that there is no conflict of interest.

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