



## Cuiabá Mobile Emergency Service: challenges and opportunities for nursing professionals\*

*Serviço de Atendimento Móvel às Urgências Cuiabá: desafios e possibilidades para profissionais de enfermagem*

*Servicio de Atención Móvil a las Urgencias Cuiabá: desafíos y posibilidades para profesionales de enfermería*

Damaris Leonel Brito Figueiredo<sup>1</sup>, Aldenan Lima Ribeiro Corrêa da Costa<sup>2</sup>

### ABSTRACT

The mobile emergency service, one of the main strategies of the National Policy of Medical Emergencies that has been implemented throughout the whole of the country in 2004, was only implemented in Cuiabá in 2007. This descriptive study reports the personal experience of one of the authors as a pre-hospital service (PHS) nurse who participated in the implementation process of the mobile emergency service. Until 2004, emergency services were carried out exclusively by the fire fighter (FF) department. The reorganization of the PHS enabled the inclusion of nursing professionals in the mobile emergency services. This reorganization of the PHS led to the detachment of the FF from mobile emergency services, moving the PHS to a new base and developing work activities as a civil service. This report describes that opportunities for nursing professionals in mobile emergency services have driven demands for specialization courses and the development of studies to prepare new practitioners.

**Keywords:** Emergency nursing; Emergency medical services; Ambulances; Emergency medical system; First aid/nursing

### RESUMO

O Serviço de Atendimento Móvel às Urgências um dos focos da Política Nacional de Atenção às Urgências que tem sido implantado no território nacional, iniciou em 2004, no município de Cuiabá, Estado de Mato Grosso sendo habilitado apenas em 2007. O estudo relata a experiência de uma das autoras como enfermeira do Atendimento Pré-Hospitalar (APH), participante do processo de implantação do serviço. Até 2004, em Mato Grosso, o atendimento às urgências era realizado exclusivamente pelo Corpo de Bombeiros (CB). A reformulação do APH possibilitou a inserção de profissionais de enfermagem em uma área não conquistada por essa profissão neste município. Tal reestruturação implicou desvinculação do CB, mudança para sede própria e desenvolvimento das atividades relacionadas ao serviço apenas por civis. Conclui-se que a nova possibilidade de atuação para profissionais de enfermagem impulsionou a busca de especializações e desenvolvimento de estudos que subsidiem a atuação prática nesse ambiente.

**Descritores:** Enfermagem em emergência; Serviços médicos de emergência; Âmbulâncias; Sistema médico de emergência; Primeiros socorros/enfermagem

### RESUMEN

El Servicio de Atención Móvil a las Urgencias, uno de los elementos centrales de la Política Nacional de Atención a las Urgencias que se ha implantado en el territorio nacional, se inició en el 2004, en el municipio de Cuiabá, Estado de Mato Grosso siendo habilitado sólo en el 2007. El estudio relata la experiencia de una de las autoras como enfermera de la Atención Pre Hospitalaria (APH), que participó del proceso de implantación del servicio. Hasta 2004, en Mato Grosso, la atención a las urgencias era realizada exclusivamente por el Cuerpo de Bomberos (CB). La reformulación del APH posibilitó la inserción de profesionales de enfermería en un área no ganada por este gremio en el Municipio de Cuiabá. Tal reestructuración implicó la desvinculación del CB, el traslado a una sede propia y desarrollo de las actividades relacionadas al servicio apenas por civiles. Se concluye que la nueva posibilidad de actuación para profesionales de enfermería impulsó la búsqueda de especializaciones y desarrollo de estudios que subsidien su actuación práctica en este ambiente.

**Descriptores:** Enfermería de urgencia; Servicios médicos de urgencia, Ambulancias; Sistema médico de emergencia; Primeiros auxilios/enfermería

\* Study carried out at SAMU - Health Secretariat of the State of Mato Grosso – Cuiabá (MT), Brazil.

<sup>1</sup> Nursing Master student at the Nursing Graduation Program, Universidade Federal de Mato Grosso – UFMT – Cuiabá (MT), Brazil; Nurse at SAMU-192 – Health Secretariat of the State of Mato Grosso – Cuiabá (MT), Brazil.

<sup>2</sup> Nursing Ph.D. Professor at the Nursing Under graduation program and Nursing Graduation Program, Universidade Federal de Mato Grosso – UFMT – Cuiabá (MT), Brazil.

## INTRODUCTION

Pre-hospital Care (APH) offers immediate care to people at risk of death, especially in trauma accidents, to reduce the impact of trauma in morbidity and mortality in the population. The Mobile Emergency Care Service (SAMU) offers care to people in urgency or emergency where the events have occurred, ensuring early care. These services are activated by dialing 192, standardized thorough Brazil<sup>(1)</sup>.

The first mobile resuscitation teams with the specific characteristic of medical care started in France only in 1955. As of the 60's there was the need to train teams of rescuers with medical participation to increase survival chances of people cared for. The *Service Mobile d'Urgence et de Réanimation* (SMUR) was officially established in 1965 and in 1968 the *Service d'Aide Médicale d'Urgence* (SAMU) started to coordinate the activities of SMUR, and the criteria and norms on they way it worked were defined<sup>(2)</sup>.

APH in Brazil was influenced by two international models<sup>(3)</sup>, the French and the American model. In the American service, which is called Emergency Medical Services, the teams are formed by Emergency Medical Technician (EMT) or paramedics trained in Basic Life Support (BLS) and Advanced Life Support (ALS), respectively. Initially, the American model was the most predominant in Brazil and the Fire Brigade (FB), that was the pioneer in pre-hospital care, performed only BLS activities. The influence of the French service, whose teams are made solely by health professionals, has been later observed in some Brazilian cities, performing also ALS at the site of the event. In this type of support the performance of invasive procedures and the use of specific equipment and material that can be performed only by physicians and nurses are included to treat more severe and complex cases. In BLS, as there are no invasive procedures, previously trained firefighters or nursing technicians can do the work<sup>(4)</sup>.

Currently, we may say that structuring and enlarging APH services is one of the main focuses of the *Política Nacional de Atenção às Urgências* (National Policy for Urgency Care). However, this structuring has not occurred in a uniform way in all Brazilian cities, and in many places it has not even started<sup>(1)</sup>, this is why we found it important to describe a process of introduction and implementation of this type of service in a Brazilian city.

The city of Cuiabá, capital of the State of Mato Grosso, has an area of 3,538 Km<sup>2</sup>, the population is about 527 thousand inhabitants<sup>(5-6)</sup> and its geographic position makes it a health reference for cities in the North region of the State and for some neighboring states. From this setting and as a nurse working at APH, this

study aimed to report the experience in the implementation of SAMU in the city of Cuiabá and to evidence the insertion of nursing professionals in this Service. The purpose of this experience report is to offer subsidies to structure and implement APH in other cities of the State of Mato Grosso, as well as in other regions in Brazil.

The present study is an experience report on the introduction and implementation of SAMU in the city of Cuiabá, conducted from May to August, 2007. It is based on the professional experience of one of the authors, who is a nurse at SAMU, and referring to official documents dealing with pre-hospital service with access obtained in the Law Department of the Fire Brigade from Mato Grosso, Official Gazette of the State of Mato Grosso and the virtual page of the Legislative Assembly of the state.

## PRE-HOSPITAL CARE IN CUIABÁ

Up to 2004, urgency care in Mato Grosso was exclusively performed by the FB through the *Sistema Integrado de Atendimento ao Trauma em Emergência* (Integrated System of Trauma Care in Emergency - SIATE), of the Company of Urgency and Rescue to Accidents. The service is provided by the Complementary Law # 32 from October, 10th, 1994, that makes the FB responsible for the performance of "urgency rescue"<sup>(7)</sup>. It is known that rescue service in the State, performed by firefighters in specific ambulances started in 1998, but SIATE was regulated only in 2000<sup>(8)</sup>. In this period, the service was under the command of the State Health Secretariat and State Public Health Secretariat and the Municipal Health Secretariats. To work at SIATE, firefighters were trained in specific courses offered by the corporation such as the Training Course for Rescuers.

This model remained until 2004, when it was redesigned to meet the National Policy of Urgency Care. The State Health Secretariat and Mato Grosso State Justice Secretariat and the Fire Brigade signed a term of technical cooperation with the purpose of regulating the attributions of SAMU for a joint work in the State.

While there was this partnership with the FB, SAMU had its Center of Medical Regulation working in the Integrated Center of Public Health Operations and the Center of Sterilized Material was in one of the fire stations of the city. From Dec/2004 to Jul/2007 Cuiabá had an APH service; however, it was not licensed by the Ministry of Health.

In this period, the service had its project redesigned and presented again to the Ministry of Health for assessment. In the new proposal it was no longer connected with the Fire Brigade, it would move to their

own headquarter and civilians were going to be included to develop activities previously performed by soldiers in the team. The project was approved and the service was licensed in 09/18/2007 through the Regulation MS/GM # 2300/2007<sup>(9)</sup>, encompassing five cities: Cuiabá, Santo Antônio de Leverger, Jangada, Várzea Grande and Nossa Senhora do Livramento, providing care to a population of about, 800 thousand inhabitants<sup>(6)</sup>.

The service was accredited with seven BLS units and three ALS units; however, in September /2008 there were only three BLS and two ALS ambulances. The proportion defined between the number of ambulances and the population cared for is one BLS vehicle for each group of 100,000 to 150,000 inhabitants, and one ALS vehicle for every 400,000 to 450,000 inhabitants<sup>(10)</sup>.

Observing the area of work from SAMU Cuiabá and the distance between its bases and neighboring cities, many times, it takes one hour to get to Cuiabá, and it is one of the factors that interfere in its resoluteness especially because of the importance of performing care at the "golden hour".

Another aspect to be considered is the population's lack of information concerning the purpose of SAMU and the care model that privilege only the biological aspects, which are challenges to be faced by managers and SUS professionals. Frequently, requests that are not biological emergencies are recorded. Many times the problems are social, such as lack of transport ticket, understanding that SAMU is a possibility for immediate care as well as an alternative to easy access to a health unit. This reminds us that the principles of integrality and resoluteness granted by the constitution are not effective in the routine of health care.

When we talk about integrality, it should be viewed as qualified health practices; satisfactory integration of health services to give prompt responses; and, also as a government ability to refer to different needs of specific groups. We know that health needs are not limited to physical and biological problems but also to good conditions of life and access to technologies that can prolong or improve life<sup>(11)</sup>.

SAMU is a possibility to make good health practices effective, since it aims at providing quality care according to the speed demanded by each circumstance, being therefore an effective care. However, this will not be effective in the lives of people cared for if the rest of the health services are not articulated and with the fragmented care model, which visualizes and care only for body parts.

### THE INSERTION OF NURSING PROFESSIONALS AT SAMU CUIABÁ

A publication from the 90's<sup>(12-14)</sup> shows the insertion

of nurses in pre-hospital care services in the city of São Paulo. When these studies were assessed, we observed that nurses from the State of Mato Grosso experience this 14 years later.

The APH service under way in Cuiabá until Dec/2004 had only one medical office formed by one physician and one nurse that sometimes worked with direct care. In this period, rescue teams did not have health professionals in pre-hospital care and this type of care was exclusively performed by rescuer firefighters.

After APH service was reformulated to meet the National Policy on Urgency Care, the care team was reformulated following the French SAMU guidelines that adopt five different categories of health professionals to form the teams. ALS teams, in this model were initially formed by two rescuer firefighters, one physician and one nurse. BLS teams were formed also by two rescuer firefighters, but the third component had an edge of being a nurse or nurse technician.

With the disconnection from the FB in Jul/2007, ALS teams were then formed by a driver that is also a rescuer, and by a nurse and a physician. BLS teams were formed by a driver, a nurse or nursing technician. All members of the teams were trained according to Regulation GM/MS # 2048/2002<sup>(13)</sup>.

To work at APH, professionals were trained with a course on *Pre Hospital Trauma Life Support*, offered only to the first group of professionals inserted in the service, those joining the team later, were trained by their colleagues in internal capacity building courses. To overcome the challenges proposed by APH and to answer qualitatively to the needs of users and the service, nursing professionals looked for capacity building and advanced courses. However, the distance between the city and APH reference centers has become a hurdle, making it difficult to train these professionals and, to overcome geographical barriers, teams have developed study groups.

As the use of care protocols enables nurses and APH teams to have a shorter care time, greater efficiency, lower mistake possibilities, thus providing efficient quality care (14), the next challenge to nursing professionals from SAMU Cuiabá is to design these protocols that will meet the guidelines from the Federal Nursing Council.

The new activity contributes to the development of new skills to face the following difficulties: a type of work that is different from that of the hospital environment due to the stressful conditions of performing care in the site of violent events, there is greater interaction and proximity to the families of victims, care is provided in restricted spaces, work is performed in teams with professionals from other areas, etc.

## FINAL CONSIDERATIONS

With the coming of the National Policy for Urgency Care, discussions on the impacts of violence increased and the services introduced have become tools to face its consequences in the life of people as well as entitling every person to a health service according to the Organic Law.

The introduction of this service in the city of Cuiabá gave nurses and nursing technicians the possibility of working in fields that have not been explored in the

State. This is a practice that demands enhanced and continuous knowledge, ability to deal with stressful situations and a broad team of professionals is involved, which is different from hospital practice. The experience reported also shows the need for a new line of production in nursing care, professionals should develop further so they can provide a more efficient pre-hospital care which meets the principles of integrality and effectiveness recommended by the National Health System (SUS).

## REFERENCES

1. Brasil. Ministério da Saúde. Serviço de Atendimento Móvel de Urgência – SAMU 192. [citado em 2008 Nov 26]. Disponível em: [http://portal.saude.gov.br/portal/saude/area.cfm?id\\_area=456](http://portal.saude.gov.br/portal/saude/area.cfm?id_area=456).
2. Lopes SLB, Fernandes RJ. Uma breve revisão do atendimento médico pré-hospitalar. *Medicina (Ribeirão Preto)*. 1999;32(4):381-7.
3. Martins PPS, Prado ML. Enfermagem e serviço de atendimento pré-hospitalar: descaminhos e perspectivas. *Rev Bras Enferm*. 2003;56(1):71-5.
4. Thomaz RR, Lima FV. Atuação do enfermeiro no atendimento pré-hospitalar na cidade de São Paulo. *Acta Paul Enferm*. 2000;13(3):59-65.
5. Brasil. Instituto Brasileiro de Geografia e Estatística – IBGE. Cidades. [citado em 2007 Nov 26]. Disponível em: <http://www.ibge.gov.br/cidadesat/topwindow.htm>
6. Brasil. Instituto Brasileiro de Geografia e Estatística – IBGE. População por municípios. In: Brasil. Instituto Brasileiro de Geografia e Estatística – IBGE. Contagem da população 2007. [citado em 2007 Nov 26]. Disponível em: <http://www.ibge.com.br/home/estatistica/populacao/contagem2007/popmunic2007layoutTCU14112007.pdf>
7. Mato Grosso. Lei complementar nº. 32, de 10 de outubro de 1994. Dispõe sobre a organização básica do corpo de bombeiros do Estado de Mato Grosso e dá outras providências. *Diário Oficial do Estado de Mato Grosso, Cuiabá (MT)* 1994; 10 out.
8. Mato Grosso. Decreto nº. 1.183, de 28 de fevereiro de 2000. Regulamenta o Sistema Integrado de Atendimento ao Trauma em Emergência - SIATE, no âmbito do Sistema Único de Saúde de Mato Grosso – SUS/MT, e dá outras providências. *Diário Oficial do Estado de Mato Grosso, Cuiabá (MT)* 2000; 28 fev.
9. Brasil. Ministério da Saúde. Portaria MS/GM nº 2300 de 18 de setembro de 2007. Habilita o Serviço de Atendimento Móvel de Urgência - SAMU 192 do Estado de Mato Grosso, localizado no município de Cuiabá (MT). *Diário Oficial da União, Brasília (DF)* 2007; 19 Set. Seção 1.
10. Brasil. Ministério da Saúde. Portaria MS/GM nº 1864, de 29 de setembro de 2003. Institui o componente pré-hospitalar móvel da Política Nacional de Atenção às Urgências, por intermédio da implantação de Serviços de Atendimento Móvel de Urgência em municípios e regiões de todo o território brasileiro. *Diário Oficial da União, Poder Executivo Brasília (DF)* 2003. 30 set. *Diário Oficial da União; Poder Executivo, Brasília, DF*, n. 193, 6 out. 2003. Seção 1, p. 57-9.
11. Mattos, RA. Direito, necessidades de saúde e integralidade. In: Pinheiro R, Mattos RA, organizadores. *Construção social da demanda: direito à saúde, trabalho em equipe, participação e espaços públicos*. Rio de Janeiro: IMS/UERJ; CEPESC; 2005.
12. Tachashi DM. Assistência de enfermagem pré-hospitalar às emergências: um novo desafio para a enfermagem. *Rev Bras Enferm*. 1991;44(2/3):113-5.
13. Brasil. Ministério da Saúde. Secretaria de Assistência à Saúde. Regulamento técnico dos sistemas estaduais de urgência e emergência: Portaria GM/MS nº 2048, de 05 de novembro de 2002. Brasília: Ministério da Saúde. 2002. 102 p.
14. Fonseca SC. Atendimento pré-hospitalar. In: Calil AM, Paranhos WY. *O enfermeiro e as situações de emergência*. São Paulo: Atheneu; 2007.