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OPERATION OF MOBILE SERVICE OF URGENCY IN REGIONALIZED UNITS
OPERACIONALIZAÇÃO DO SERVIÇO MÓVEL DE URGÊNCIA EM UNIDADES REGIONALIZADAS
FUNCIONAMIENTO DE LOS SERVICIOS MÓVILES DE URGENCIA EN UNIDADES REGIONALIZADAS
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ABSTRACT

Objective: describing the operation of the SAMU 192 Component in regionalized units. Methods: a descriptive and exploratory study with a qualitative approach conducted in a Regulation Center and Bases of Operating Mobile Urgency Care Service in Piaui/PI, Brazil. Data were collected through semi-structured interviews, using a questionnaire applied to 17 professionals working in prehospital care and the data were analyzed using Content Analysis Technique in the mode of Thematic Analysis. The project was approved by the Research Ethics Committee, CAAE: 30399614.5.0000.5210. Results: from the analysis four thematic categories emerged, which made evident that pre-hospital care in regionalized units follows the guidelines established by Ordinances regulating the service, but have some peculiarities that suit the regional reality and give resoluteness to the service, although there are also barriers. Conclusion: despite some limitations, the operation of the service offers good solving to the demand of the service. Descriptors: Emergency Relief; Emergency Nursing; Communication Systems between Emergency Services.

RESUMO

Objetivo: descrever a operacionalização do Componente SAMU 192 em unidades regionalizadas. *Método*: estudo descritivo e exploratório com abordagem qualitativa em uma Central de Regulação e Bases de Operação do Serviço de Atendimento Móvel de Urgência no Piauí/PI, Brasil. Os dados foram coletados por meio de entrevista semiestruturada, utilizando um questionário aplicado a 17 profissionais que atuam no atendimento pré-hospitalar e os dados foram analisados pela Técnica de Análise de Conteúdo na modalidade Análise Temática. O projeto foi aprovado pelo Comitê de Ética em Pesquisa, CAAE: 30399614.5.0000.5210. *Resultados:* na análise emergiram quatro categorias temáticas, que evidenciaram que o atendimento pré-hospitalar em unidades regionalizadas segue os parâmetros estabelecidos pelas Portarias que regulamentam o serviço, porém possuem algumas peculiaridades que se adequam à realidade regional e dão resolutividade ao atendimento, embora também existam barreiras. *Conclusão:* apesar de algumas limitações, a operacionalização do Serviço oferece boa resolutividade à demanda do serviço. *Descritores:* Socorro de Urgência; Enfermagem em Emergência; Sistemas de Comunicação entre Serviços de Emergência.

RESUMEN

Objetivo: describir el funcionamiento del Componente SAMU 192 en unidades regionalizadas. Métodos: un estudio descriptivo y exploratorio con enfoque cualitativo realizado en una Central de Reglamento y Bases de Operación de los Servicios Móviles de Urgencia en Piauí/PI, Brasil. Los datos fueron recolectados a través de entrevistas semi-estructuradas, utilizando un cuestionario aplicado a 17 profesionales que trabajan en la atención prehospitalaria y los datos fueron analizados utilizando la Técnica de Análisis de Contenido en la modalidad de Análisis Temático. El proyecto fue aprobado por el Comité de Ética en la Investigación, CAAE: 30399614.5.0000.5210. Resultados: del análisis surgieron cuatro categorías temáticas, que mostraron que la atención pre-hospitalaria en unidades regionalizadas sigue los lineamientos establecidos por las ordenanzas que regulan el servicio, pero tienen algunas peculiaridades que se adapten a la realidad regional y dan firmeza al servicio, aunque también hay barreras. Conclusión: a pesar de algunas limitaciones, la operación del Servicio ofrece una buena resolución a la demanda del servicio. Descriptores: Ayuda de Urgencias; Enfermería de Emergencias; Los Sistemas de Comunicación entre los Servicios de Emergencia.

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INTRODUCTION

The assistance service in urgencies and emergencies, already precarious and inadequate, suffered a greater burden with the exponential increase in population and changes in the epidemiological profile and mortality in Brazil. Such changes are related to several factors, including the development of automobile industry which in turn generates increased vehicle traffic on public roads, bringing more accidents. Also linked to these factors are: violence, cardiovascular

Faced with this problematic experienced worldwide, different systems were created by various countries due to the need to find effective solutions to improve care in urgency and emergency care sectors, which was in disorder.¹⁻²

disease and other acute harm.

In order to remedy the deficiency of urgency and emergency sectors in Brazil, since 1998, it took the implementation of a series of policies to promote public health toward this area, aimed at proposing the best people to service conditions, reducing the risk of disease and other health problems, providing universal and equal access to programs and services, as well as governing the Federal Constitution.³⁻⁴

Among these stands out the National Policy for Urgencies (PNAU) that aims to promoting the quality of life, organization's network, operation of central control, training and continuing education of teams and humanization of care.⁵

The PNAU was reformed establishing the National Network for Attention to Urgencies in the Unified Health System (SUS), which comes in order to serve users in urgency situations, to be first met the basic units of SUS enabling the full resolving capacity injury or transfer of the stabilized victim to a more complex service, following a hierarchical network with regional regulation of increasing levels of complexity and responsibility.⁶

The documents including the PNAU are clear, concise and design an evolution of the program, requiring an interaction between those responsible for the proper functioning of the service, namely managers, professionals and even the citizens. However, it is thought that the consolidation of the pre-established components of this policy must have produced different experiences in different regions of the country, so the importance of analyzing these experiences both in large cities and in small towns covered by the program. On that basis the regionalization of urgency service

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follows with one of its guidelines that most stood out in recent years.^{5,7}

Component SAMU 192 was mirrored in international prehospital care models, similar to what was already adopted and executed by the fire brigade military since the 1990s.¹

The SAMU service flowchart occurs through the drive through a phone call to the number 192, when the technical regulation trained directs the call to the medical regulator which, in turn, will analyze the situation, starting the immediate care with guidelines directed to the victim or the person who activated the service. About the information collected by the regulatory physician, he can decide whether or not there is a need to shift from a mobile unit and what the best intervention to be adopted, so then the radio operator triggers the nearest vehicle to what happened to the realization of care. 8-9

Regionalization of the pre-hospital service is to implement service centers in cities far from major centers, which serve as reference for this kind of help, offering support according to the epidemiological profile of the events in the region in an attempt to make such cities can make solving their demand emergency or at least stabilize the grievance to the removal to larger emergency departments is properly made not offering higher risk victims.⁶

The questioning regarding the solving of urgent care in regionalized units located far from major centers, led us to choose this theme, considering that the cities of small and medium size, that have the Component SAMU-192 may encounter barriers to the provision of care, taking into account the distance and the county economic conditions hinder access to capital that serves as the main gateway to these calls for concentrating the majority of specialized services.

It has yet to justify the lack of studies addressing regionalized units, which has been highly disseminated through the countryside. Thus the study aims to providing insight to healthcare professionals, service managers and the public that may contribute to the improvement of the service in decentralized regions.

This study aims to describe the operation of the Component SAMU 192 in regionalized units.

METHOD

This is a descriptive study with a qualitative approach. 10-1 Study Scenarios were SAMU Regulation Central of Parnaíba, Operation Base that works together. There

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were also studied decentralized bases that are regulated by Parnaíba: Buriti dos Lopes, Cocal and Luis Correia.

Study participants were 17 professionals who work directly or indirectly in SAMU assistance of both the Regulation Center and Base of Parnaíba, Operation as decentralized bases regulated by it. Among them, two interventional/regulatory doctors, nurses, three auxiliary technical regulation/radio operator, four technicians, six rescuers. It was defined as inclusion criteria: SAMU professionals with years of service from a year agreed to participate.

Data collection was carried out in May 2014, through a semi-structured interview using a pre-prepared questionnaire consisting of two parts: one with identification data of the participants and another with a question related to the operation of the Units Service regionalized.

The interview is a meeting between two people through a professional feature of conversation, to obtain information about a particular subject. ¹² In the semi-structured interview, the interviewer is free to develop any situation in any way it sees fit, that is, so that you can explore more broadly the issue and the respondent has the freedom to freely express his opinions and feelings. The interviews were recorded using MP3 player and had an average duration of 30 minutes. The transcription was carried out in full, aiming at better management of information.

Data analysis was performed with the use of the Content Analysis Technique in the Thematic Analysis mode. For exploration of the material, this technique consists of centrality in the theme, through the interpretation of a word, phrase, a summary that establish communication, in order to investigate the subject matter.¹¹

processing of the The results established in three stages: pre-analysis, material exploration and treatment of results/inference/interpretation. The stage consisted in the selection of materials chosen to be analyzed, through a careful reading; in the second stage there was explored the material through host and identification information of material available problematic; in the final stage there elaborated an essay, reporting a conclusion, based on an understanding of the proposed theme.¹¹

During the research participants there were properly informed about the contents of all the study and consented to their participation by signing the Consent Agreement and Informed - IC, which was guaranteed to the participants overall agreement on the processing of research and freedom data to refuse their participation in any phase of the research, without any penalty.

According to Resolution 466/12, all research involving human subjects have risks. This study presents minimal risks such as embarrassment, distress and invasion of privacy by the participants to share information about routines and procedures performed in the service.¹³

These risks were minimized, assuring participants that the information it generates will not be shared with people outside of the research group, with the guarantee that data will be kept confidential in the final report no personal identification. Participants were identified by ordinal numbers and the interviews were previously scheduled and in reserved place.

The knowledge generated is the main benefit derived from the study, which is an indirect nature, aimed at population and health professionals involved in the care and management of the service. We can mention also benefits as the possibility of extending the look and operation of the service offered to the flowchart of this service, enabling its full understanding and organization.

The research conformed to the standards established by Resolution 466/12, which deals with research involving human subjects. 13 The project was submitted for consideration of the State Coordination Component SAMU-192 and approved by a document signed by the General Coordinator of the service in then it was submitted to the Research Ethics University Center Committee of the UNINOVAFAPI and approved under CAAE: 30399614.5.0000.5210.

RESULTS AND DISCUSSION

From the analysis of discourses and seeking to achieve the research objectives, four thematic categories emerged: System of regulation and routines of the service; Occurrences attended by the Regionalized Unit; Physical structure and human resources; Difficulties encountered in the Regionalized SAMII

♦ System of regulation and routines of the service

In this category there were described the regulatory system, demand and resolution of service, the routines and duties of professionals.

The Mobile Emergency Care Service stands out in the context of regionalization as mobile pre-hospital component that supports the population to the service network, which would be unable to move to the big cities in search of assistance, this reality is also experienced in the scenarios.⁶

The demand is great; I will not say that we resolve 100% [...] but I will tell you with certainty that around 80%, 90% of the demand for care is settled right here in our macro-region which is Coastal Plain. DEP-01

The study of the Central Regulatory about the macro-region of Coastal Plains, in the State of Piauí, which encompasses several cities upstate, in the tracks of the banks of the River Parnaiba and its tributaries. It is only in Piauí which still operates with its own regulation, independent of the Regulation Center located in Teresina and regulates all other state bases. This center is responsible for regulating the Parnaíba Base and also the bases of the cities of Luís Correia Lopes Buriti and Cocal, which have only basic life support units. This Central is aiming to supply all demands of the four cities in the Northern State of Piaui; which, according to demographic data in 2013, add up to a population of over 200,000 inhabitants who are in the reference health service region.

Parnaíba is the only city in Piauí that governs alone, which does not depend on the capital [...] DEP-09

[...] we regulate Luís Correia, Buriti dos Lopes and Cocal [...] there exists a basic unit in each city. DEP-01

Regarding the routines of professional participants of the study, it is unanimous in all statements the report of the importance of the conference materials at the beginning of each shift, thus maintaining care teams in always being able to register when service requests.

When one enters the service does not know what will find, so the first thing I do is check my ambulance, know what I have in my unit. DP-01

[...] as soon as it starts the duty [...] to ambulance will check the equipment, materials to see if there are spare need [...] DP-17

[...] with the Nursing Technician, the rescuer and the doctor, we enter into the ambulance to check if re all ok stuff, it's all "functioning" [...] then starts the call. DP-04 In our routine I get the call, check the material, the ambulance, which is called Cheklist. DP-13

The examination of the entire communication system, broadcast radio and the telephone, conducting contact with all

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ARs (adjusted basis) it is the responsibility of the Telephone Operator of Medical Regulation.

When we arrive in the center, we first see if all means are all ok, working phone, [...] this basic check. DP-11

Contact with the bases is by phone [...] Luís Correia we call on the radio, but Buriti is by phone and Cocal sometimes the radio works and sometimes not. DP-10

In Regulation Center the care routines start with TARM that to answer the call should conduct the dialogue with the user in order to extract the most information about what complaint happened, focusing mainly on information proving the truth of the call, the precise address where the injury occurred with reference points to help to rescuers locate more quickly the address. The experience of this professional enables him to identify, during the call, inconsistencies in reporting that lead him to find malicious requests, so-called "hazing".

The person calls speaking of occurrence, we took all the data, address and everything, and we pass to the team personnel. DP-10

[...] it has to know start some clinical information and they have taken a lot of things from who is on the other end and already suspect for their experience if it is a hazing. DP-02

When enough information is collected and there is the idea that injury really needs care the TARM transfers the call to the regulator doctor who decides the fate of the case. After the ambulance exit the TARM maintains contact with the same in order to monitor the occurrence until the patient delivers the appropriate service for his needs.

In all instances we fill a form with patient information and then pass the call to the medical regulator. DP-02

After the doctor releases, I fill the chip to know which ambulance she will send. DP-09

The Parnaíba SAMU adopted a list of especially standardized codes regionalized unit. The CODE "C", which serves as a means of communication between the central and professionals of Regulated Bases. works to differentiate code communication MECS, CODE "Q" is used worldwide by a variety of services. The change occurs in the replacement of the letter "Q" by the letter "C" and instead followed by letters "A" through "Z" there are followed by numbers from "1" to "35".

> Here we have a group of codes. There are 35 codes that goes from C1 to C35, standardized to the SAMU Parnaíba. DP-02

The operationalization of Regionalized SAMU Operating Bases is to articulate the

separate teams according to the support being offered to the population. The Base should provide a suitable environment for packaging materials, parking and cleaning the well with dependencies vehicles for staff accommodation.⁹

Team of SAMU bases, are divided into Advanced Support Teams composed of interventional Doctor, Nurse, Nursing Technicians and Rescue and Basic Support Teams composed of Nursing Technicians and the Rescue.

[...] advanced drive components is the doctor, nurse, nursing technician and first responder and basic unit we have a nursing technician and a first rescuer [...] DP-03

The interventional doctor and the nurse works only in advanced support ambulance and always at the beginning of their shifts, as a common activity to all employees working in the intervention, check the materials and equipment of the car to see if working properly or need repair and perform reset whenever necessary. Periodic verification of the material is of great importance for equipment failure can result in compromised care, as witness 01.

What differentiates the enhanced support unit of the basic unit is the presence of the doctor and the nurse in advanced, while in only basic technical and rescuer. DP-16

If the ambulance of basic support is moved, the Medical Regulator already determines to which health care will be referred to the victim. If the ambulance is moved to the advanced support Interventional Doctor that will make this decision.

We receive the calls and we move up to the urgency, we serve the patient, provide all the support necessary and we have forwarded the same to larger reference. DP-09

In practice, after stabilizing the patient he is driven to the clinic and is the responsibility of the SAMU team until he is properly received and established in a hospital bed.

The Component SAMU 192 also has the help of professionals from other areas to better perform its functions, such as: the fire department, when it occurs, for example, accidents with victims trapped between hardware or up debris. The military police acts in cases of suspected victims of some type of violence.

[...] whenever the SAMU goes to an occurrence, mainly related to violence, it makes the request to the police to give support to that we do not put at risk. DP-17 Some events, especially at night, when there stab wound or gunshot, we ask for help from police. DP-09

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[...] depending on the number of victims or also the victim of the situation, if he has stuck in hardware; so firefighters have helped a lot in these situations. DP-17

[...] Firefighters also help us a lot in the accident; we have a very good partnership. DP-09

The nursing technician works under the supervision of nurses in Advanced Support Unit. In the Basic Support Unit, where there is no active nurse's presence, the technician works only under medical guidelines for the regulation, going to the doctor regulator and TARM through radio, all service information and on state it is the victim and get through this guidance on how to proceed.

- [...] along the way, sometimes [...] asks us to call and talk to the doctor and confirmed that medication can be done [...] DP-12 Nurses study participants, working in shifts of 24 hours weekly regime. Although it is recommended that they are divided into two shifts of 12 hours. DP-13
- [...] the recommendation and that this duty is not running [...] ends up being more convenient we make this workload all at once [...] DP-17
- [...] we have a workshift of 24 hours per week, would be if two shifts of 12 hours [...] we make agreements, does the trading of shifts each and every one is 24 hours. DP-04

This professional works only in advanced support ambulance; however, there are currently discussions about the inclusion of professional nurse in basic support ambulance, in order to qualify the service and optimize service, mainly on the assumption that in cities where there are only units basic support of Regionalized SAMU, there are also complications of greater complexity that requires a support, that some professionals refer to as the SAMU "semi-advanced". In such cases only the nursing technician and rescue would have to give better resolution to occur, further confirming the importance of the presence of the nurse in these units.

> Even in some states ambulances already work well with the nurse in the basic unit, which they are calling semi-advanced [...] but are already discussing this for a long time. DP-17

> Lately we are seeing with the managers the possibility of including a nurse within the basic support ambulance. Why have situations where only a technician and paramedic not realize. And the presence of another professional would greatly improve the situation. DP-01

According to Resolution 375/11 of COFEN¹⁴, the direct presence or absence of the nurse or the pre-hospital care is necessary. In the pre-hospital care it is necessary both in land

mobile air and sea units where there is presence of known or unknown risk.

This actually is a requirement that is the COREN [...] the technician has to be supervised by nurses, but since I'm the only nurse on duty [...] And also because of the nurse the nurse who 're on duty who is responsible for advanced, it may be penalized by're responding by a professional who has no way he's closely overseeing. DP-17

These considerations reinforce the idea of the importance of the presence of a professional nurse within the basic support staff, mostly in units of regionalized SAMU, which mostly consist only of basic life support units which consequently serve complications of all nature. This professional's role is to supervise and educate the team that performs nursing services, based on current protocols, not to mention that most regional and state coordinators are SAMU nurses. ⁶

♦ Occurrences served by Regionalized Unit

In Piauí work 57 SAMU bases regulated by the Central State regulation, four bases regulated by the Parnaíba Regulation Center and two bases regulated by the Central municipal regulation of Teresina, totaling more than 60 bases distributed throughout its territory, in their most basic life support units that provide occurrences of all kinds, whether traumatic, obstetric, psychiatric or clinics.

With the dissemination of Care National Policy of Emergency and incentives from the Federal Government to further regionalize the Mobile Emergency Care Service, many projects are underway at the State Service Coordination which must be submitted to the Regional Management Board - CGR, if any, and be approved and prioritized in the Inter Bipartite CIB Commissions of each State for the approval of new bases.

This Regulation Center is responsible for regulating the Parnaíba Base which is located in the same building, the base has a Basic Support Unit, a Support Unit forwards a motorcycle ambulance and a Support Unit. It further regulates the bases in the cities of Buriti of Lopes, Cocal and Luís Correia, both with a Basic Support Unit.

Although a Regionalized Unit located far pole of reference for regional health, which is the Teresina city, the Parnaíba emergency mobile care service has, in its macro-region, a chain of average health services to highly complex serving most of the grievances met, there is no need to transfer to other locations.

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With the increasing traffic of vehicles on the streets and added the negative variables in traffic, as stress, alcohol consumption and unauthorized persons in vehicle ownership ago, as a result, a constant number of accidents. As in most localities of our country the profile of the victims met by the advanced support unit of the SAMU 192 in Parnaíba region come mostly from traumas from traffic accidents, followed by acute incidents as heart attacks, strokes and seizures, pregnancy complications. Basic support already caters mostly containment patients with psychiatric disorders and less complex trauma of various kinds, hypertensive emergency and other simple diseases.

It is common to have the idea that the amount of serious accidents is greater, in a densely populated region, but notes that the basic support ambulance becomes the most requested by the occurrence of a greater number of small incidents such as, malaise, dyspnea, tachycardia, sudden increase in PA, syncope, and small falls, among others.

Still present in this medium there is a support ambulance, regulated by the SAMU which mostly operates in the transportation of patients who have some disability to travel to a health care facility

Support ambulance meets patients who are not serious. Where will only the patient and the rescuer. DP-04

Although each ambulance is systematically divided and limited to its service profile, whenever there is a major accident of greate scale with multiple victims, requiring a broad service spectrum and the presence of a larger number of professionals, available ambulances will be forwarded to local.

The Component SAMU 192 also has the help of professionals from other areas to better perform its functions, such as the fire department, when it occurs, for example, accidents with victims trapped between hardware or under rubble. The military police acts in cases of suspected victims of some type of violence.

One of the difficulties encountered in this area is the efficiency of medical regulation to identify the profile of the accident and to authorize the displacement of adequate support in the case, basic or advanced support.

This issue of gravity only really know at the time, because while connecting the person passes a gravity, and when it arrives on site is something much simpler, as there are people passing a 'thing' simple and time is something worse, it will depend on the

regulation of doctor and the conversation he has with the person by phone. DP-04

The intention is that no time is lost in the displacement of a basic support unit for a major accident or the occupation of advanced support ambulance sent to a simpler service case.

We also have the victim's removal problems by their own means even after the activation of SAMU 192.

It occurs a lot, calls requesting an ambulance and when we get to the place the patient has already been removed by own means and no one returns the call warning that the patient has already been removed, and you don't need the ambulance. DP-04

With a broad profile, variable and increasing calls the Parnaiba Regional SAMU has always been adapting as best we can, despite the difficulties and of them have only two ambulances, a basic support and other advanced support.

♦ Physical structure and human resources

According to the decree of the Ministry of Health, which regulates the SAMU Regulation Central in regionalized units with a population of up to 350.000 that fits in the studied Unit profile, we shall meet the minimum quantitative professionals with 1 Doctor regulator with duty 12-hour day and other load-time of 12 night, 2 Auxiliary Operator of Medical Regulation on duty 12 hours day and with 1 hour load 12 night and 1 Radio Operator with call 12h.

However it was found on the team that makes up the Regulation Center the presence of two doctors who take turns with each other in regulatory functions and interventional every 4 to 6 hours. There is an indoor routine exchange function every four to six hours between regulation and assistance through an informal agreement between the parties that is not reported in any ordinance or allocation of medical service.

We were divided, one in regulation and another in the intervention, and can change the function each 4 or 6 hours, depending on what was combined. DP-01

In the Regionalized Unit studied the workload of the TARM is of 6 hours during the day and 12 hours at night with two professionals per shift. With regard to TARM and RO, engaged in the technical function of the Regulation Center, should be two professional performing distinct functions, but in Regionalized Unit study the TARM has concurrently also the function of a RO which showed no damage to the implementation of

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regulation since it is a small control center, which could not happen in larger units called with a more constant flow.

[...] we're two TARMs working on phone 192 and operating radio, playing ambulances at the address where the request occurs. DP-02

According to the Decree 2048/02, the medical professional performs beyond medical regulation system, where there is need for a comprehensive and updated view of the resources available, also works at the reception of so-called aid, demand analysis, classification in service priorities, telephone advice, direct assistance to patients in ambulances and in determining the patient's destination.¹⁵

[...] we do both part of urgent and emergency trauma as clinic, then serve the patient, we give full support for that patient and we have forwarded to the reference unit after the service [...] DP-08

The nurse professional assignments in SAMU component are: Supervise and evaluate the nursing team's actions in Service Prehospital Mobile, in the execution of prescriptions, providing greater technical complexity nursing care aimed to critically ill patients and increased risk of life.

In addition to the Advanced Support Unit, other basic life support units have also trust on the presence of the nurse, directly or indirectly, both giving duty at the base as giving support when they need it comes to more complex occurrences.

- [...] here is the technical and the rescuer. The nurse on duty takes once a week [...] whenever we need he's always ready to help us. DP-11
- [...] SAMU coordinator here is the nurse giving support when we need until the doctor himself of the emergency room when you need it, whether it is a more severe case, he attends. DP-14

As the main duties of the professional Practical Nurses are providing direct nursing care to stable patients or serious condition, under direct supervision or distance of the professional nurse. Perform shifts of 12 hours under the direct or indirect supervision of a nurse assisting the same and developing activities related to nursing team in their technical training. The service has two nursing technicians, one for each ambulance.

Professional Rescue (Driver) has as his powers and duties in addition to lead, fully meet the vehicle and the components of the ambulance that are his responsibility and perform basic maintenance. It is inherent to the rescuer still assist the health staff in basic

life support gestures, such as the detention and transportation of victims.

The Rescuer from the Regionalized Unit under discussion works with regime shifts 12 hours. Like other professional team starts his shift with the checklist of ambulance materials, but with the difference verify the physical structure and mechanics of the vehicle, whether it is working properly or needs maintenance. He should know the city, the main access roads around the territory covered by mobile prehospital service.

Of course the part of the ambulance itself, the driver who is his job, okay for checking oxygen and functionality of the ambulance itself DP-17

[...] Making cheklist the car [...] to know if had any problems with the material or the car and if you have some missing material, fuel, oxygen agent provides soon, our job is this the first time. DP-01

Material resources are provided from the initial design of the implementation of SAMU bases and should be thoroughly calculated and distributed, as these criteria are analyzed for the service is properly enabled.

With regard to material resources, will always be small obstacles, but the Health Ministry, aware of the problems of this nature, in partnership with the Health Departments of the States and Municipalities seek to change this situation it proves unfavorable to the assistance of the population. For this are investments related to costing and physical fitness and equipment of the members of these services care networks in the pre-hospital care area, the regulation of plants and promote the training of human resources. ¹⁵

In designing some teams these features proved to be relevant to a proper development of the service, but small errors were noted, a fact that was confirmed when asked teams. Despite considering the material resources sufficient for the development of its activities; however, there were complaints regarding the acquisition of new and updated material, presented to teams in training and refresher courses. Complaints regarding the vehicles have also emerged, however such problems are solved without causing great damages the dynamics of service.

[...] new materials we've requested, as plank is still the old wood and is now used for other material. DP-14

Coordination is always a concern're providing enough material, so we have no problems [...] DP-17

The regional unit of SAMU of Parnaíba is part of the complex next to the Municipal

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Emergency, Department of Health and Stabilization Base. In the SAMU 192 limits in its infrastructure consists of reception, waiting room, central control, professionals separated by gender and post rest, management room, storeroom, toilets, dining room, kitchen, cleaning supplies deposit and double parking for ambulances and space to conduct the same; all these structures.

The entire unit is fully furnished, ensuring the shelter and comfort of professionals. The central control room has computers with internet access, radio transmitter, walkie talkies and telephone. The warehouse contains all necessary materials for the healthcare service of professionals.

The ordinance defines the SAMU must have a direct permanent training program provided by the unit. It is predicted by PNAU the transfer of funds and materials for the Teaching Laboratory working in Health Procedures; while teaching core does not appear in the physical space of the unit.

The Regulation Center of allocations and the regulated Bases proved to be suitable to local conditions, as far as possible, especially because it is small units, but demand is steadily increasing and the quantitative show that reformulations in their structures are necessary to provide better care to the population, both in the pre-hospital component as hospital should be able to receive and well-meaningly accommodate the demand generated.

♦ Difficulties found of Regionalized SAMU

The research scenario analysis reveals small obstacles, which can be stressed as barriers to the smooth operation of the service, of which the complaint by various parties with respect to the malfunction of radio communication equipment that have low signal coverage various parts of the region, reaching there any coverage in more isolated locations.

The Regulation Center need to dispose of this equipment without fail to develop their activities, since there is no possibility of making medical regulation without adequate communication between the staff. In this sense it is important to emphasize that the professional tools required to offer a quality service and it does not always have all the necessary apparatus and, as a service that handles lives, the situation becomes more critical.

Most of the time the radios are working unstably, we have a hard copy, you often

have to go by telephone by calling 192. DP-05

Communication with the Parnaíba base is via cell phone, no radio, when there happens any occurrence we only does the C14 when it comes here [...] unless the pass where we have someone with mobile rural antenna we care about central. DP-15

problem expressed Another in the was the difficulty statements population to inform properly the situation of the victim and the injury, causing difficulty in medical regulation to identify the profile of authorize the accident and to displacement of adequate support in the case, basic support or advanced, even with all the experience TARM and medical regulator often only know the severity of the case when they arrive in the occurrence.

This issue of gravity only really know at the time because when connecting the person passes a gravity, and when it arrives on site is something much simpler, as there are people passing a 'thing' simple and time is something else serious, this will depend on the regulation of doctor and the conversation he has with the person by phone. DP-04

The intention is that no time is lost in the displacement of a basic support unit for a major accident or the occupation of advanced support ambulance sent to a simpler service case. From this perspective it is crucial that the people requesting the SAMU service must be oriented with respect to the types of calls that are generated by the service, a fact that would make the vehicles were not occupied with unnecessary occurrences, optimizing the service.

Another attempt barrier in the speeches was over the removal of the victim by own means, even after the activation of the SAMU.

It occurs many calls requesting an ambulance and when we get to the place the patient has already been removed by own means and no one returns the call warning that the patient has already been removed, and you don't need the car. DP-07

It is important to consider that this attitude of the population can pass in delay in operation of the service and the evolution and patient's prognosis as the improper handling in transport maneuvers brings irreversible injuries.

Regionalization, despite allowing a better organization of care, joint services defining flows and resolutive references. Not always access to referral services when patients need more complex care is easy for decentralized basis due to be geographically distant from major health centers and this incurs often

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complications in the transfer of victims, although efforts are maintained by the parties involved to develop the best possible way a good network operation.

As in all countryside is far and as our referral hospital is Parnaíba so severe if anything happens or some more serious trauma we have to be prepared [...] until you reach the reference unit. DP-12

The foundations covered by Regulation Center study that have only one Basic Support Unit are geographically distant to about 90km of Reference Service, reflecting in just over 1 hour to carry out this route. This poses risks to the teams and the victims, because as we know Basic Unit of SAMU not only serves low-complexity occurrences in these cases. With the increase in estimates traffic accident with trauma, these are the key calls made by the SAMU teams across the region there is always the possibility of encountering severe cases not providing the proper support.

[...] have more distant locales occurrence [...] within [...] If I go out in the morning we didn't get us 7:00, 10:00 in the morning, if I have to die, die, [...] There's no pay phone, radio won't start [...] there's no way to get in touch with us. [...] When it comes to pregnant women, poor women, stop halfway. DP-08

The different levels of care should complement each other through organized and regulated mechanisms for reference and counter reference, for this is of fundamental importance that each service accept and adequately meets the share of demand that is referenced you and take responsibility for forwarding this.¹⁵

And the sole responsibility of pre-hospital care team stabilization and driving the victim to the hospital referenced to properly be receptioned and established, but this cannot always be accomplished quickly due to barriers in the service network with overcrowding in hospitals interferes directly in the routine of professionals hindering the release of equipment and stretchers so that they can follow for the next occurrence.

This difficulty in operationalizing services with the release of equipment and stretchers is experienced by pre hospital care professionals throughout Brazil, as:

Right now this patient we take the accident, we left him in the room x-ray that did not have a ward wave [...] and had to vacate our litter [...] and it is the reality of virtually every day. DP-04 In Parnaíba has a big problem, the Referral Hospital [...] serves the entire region, so often we have certain strength of the professional [...] except that we know that

the SAMU works as the concept of wave zero [...] then or has vague or that it did not have to get that patient. DP-17

Another issue to consider is the number of ambulances in sufficient SAMU regionalized as testimonials of the teams. Edicts Regiment Mobile Emergency Service, defined as 1 MES deployment option, population up to 100 thousand inhabitants and one USA for every 400 thousand, but in practice those quantities are not sufficient, as the morbidity and mortality profile increasing and that kind of health service becomes increasingly essential and required.

I think we should have more basic and advanced why the population is large and we only have a basic and an advanced only. DP-06

CONCLUSION

In relation to service routines, study unanimously participants expressed importance the of materials used in conference calls always at the beginning of the call. This routine starts from the central control, with TARM and the regulator doctor checking the communication system and entering with regulated basis, as in the operating bases where there is a concern for all professionals working in care in checking the vehicle and materials used in the care in order not to be caught off guard with lack of some equipment during the rescue.

The SAMU call profile regionalized study equaled the majority of care provided in other regions of the country, as with the increasing development also in small towns, there is an increase of diseases such as traffic accidents and even acute incidents, which in its Most of them are served by the USA. However the USA serves primarily less complex cases, however when there USA in the city and there is a need for more serious calls USA is used.

The material resources available in the service are sufficient for the development of the activities; however complaints arise regarding the acquisition of some new and updated materials. Teams are structured according to the MOH ordinances. The presence of nurses in some Basic Units and the nursing technician in the Advanced Unit are facts that are not recommended in ordinances, but contribute to the optimization of the service.

Both in Regulation Center as the four SAMU bases of operation regulated under study, they work with the minimum necessary although they face some barriers in their implementation. Under this assumption, it is recommended that service engineers with the

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team and state management, discuss on the restructuring of pre-hospital care network, aiming at improvement of the service and the optimization of services to the population.

The main barriers affecting the operation of the service in Regionalized SAMU unit are low signal coverage for radio communication equipment, removal of victims by their own means by the user, even after the activation of the SAMU, the geographical distance of Regulated Bases relative to hospital referral services, insufficient number of ambulances to the population of the area and how reality experienced by pre-hospital services in other regions, which is the congestion of hospital beds, directly affects the operation of the SAMU at any level, causing the stretcher retention and vehicle materials thereby delaying detachment to other occurrences.

It is hoped that this study will enable new comprehensions into the function of regionalized emergency room located in the inner cities of the country, so they can function properly, making it possible to decrease rates and injuries by inadequate care in the pre-hospital environment and still a new look of the nurse who turns out to be necessary for the proper functioning of all health services, particularly in the Emergency Department.

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