http://www.periodicos.uem.br/ojs/index.php/CiencCuidSaude
ISSN on-line1984-7513
DOI: 10.4025/cienccuidsaude.v19i0.51101

ORIGINAL ARTICLE

PRE-HOSPITAL CARE IN YOUNG POPULATION OF THE FEDERAL DISTRICT

Lucas Vicente de Sousa*
Paulo Henrique Fernandes dos Santos**
ThatiannyTanferri de Brito Paranaguá***
Valéria Bertonha Machado****
Claudia Maria Silva Cyrino*****
Juliane Andrade******

ABSTRACT

Objective: To describe the types of pre-hospital care for young people, carried out by a Fire Department, and to compare them according to the characteristics of the victims and the incidents. **Method:** Cross-sectional, retrospective, descriptive and analytical study, with a quantitative approach, composed of 198 incidents attended, in 2015, in the Federal District. Data retrieved from the service's file records. For the proposed comparison, the chi-square test and the likelihood ratio were applied, adopting p <0.05. **Results:** Most of those attended were male (54.0%) and over 18 years old (86.4%).The rescue with response time less than 10 minutes (83.8%) and severity classified as stable (98.0%) predominated. The comparison result was significant for the trauma category in terms of age, sex, place of incident and regional destination, all with p≤0,0001. **Conclusion:** The young population studied, with an emphasis on the male sex, is vulnerable to traumatic events, specifically on public roads. The exposed data point to the need for health education and intersectoral actions that promote the prevention of these incidents in the young population.

Keywords: Prehospital care. Health profile. Health services needs and demand. Young adult.

INTRODUCTION

Pre-hospital ambulance care is a specialized service that aims to timely reach the victim, after the incident of a health problem outside the hospital, of a clinical, surgical, traumatic or psychiatric nature, which can lead to suffering, sequelae or even death and it is necessary to provide adequate care and/or transportation[1].

Such care is an important element of public health care, since the fast and disordered growth of cities, intensified, especially in the capitalist period, has caused important epidemiological changes, with an increase in diseases related to urgent and emergency situations[2].

Based on this scenario, the Emergency Care Network was established, through Ordinance no. 1600, of July 7th, 2011. This ordinance reformulates the 2003 National Emergency Care Policy, and aims to associate the health actions and services, to expand humanized and comprehensive access to patients in urgent and emergency situations in health services[3].

In this context, it is the Federal District's Fire Department (CBMDF) responsibility to comply with the Emergency Care Network. Furthermore, in the Federal District(FD), pre-hospital care (APH) is carried out through cooperation from the Federal District's State Department of Health (SESDF) with the Federal District's Fire Department (CBMDF)[4]. Thus, basic, or advanced life support is provided in medical emergencies of all kinds, linked to SAMU, through the Integrated Medical Regulation Center[4].

Basic Life Support (BLS) and Advanced Life Support (ALS) are two types of assistance offered in ambulance APH. The BLS consists of performing non-invasive technical procedures, and ALS is the assistance offered to individuals at imminent risk of death, through

*Nurse. Resident in Urgency and Emergency at Hospital das Clínicas of the UFG. Goiânia, GO, Brazil. E-mail: lucasvdesousa@gmail.com. ORCID iD: https://orcid.org/0000-0003-3724-9128
**Nurse. Master of Nursing. Professor at the Nursing Department at UnB. Brasília, DF, Brazil. E-mail: paulofs@unb.br. ORCID iD: https://orcid.org/0000-0003-4533-0129
***Nurse. Doctorof Nursing. Professor at the Nursing Department at UnB. Brasília, DF, Brazil. E-mail: ttb.paranagua@gmail.com. ORCID iD: https://orcid.org/0000-0003-0562-8975
****Nurse. Doctor of Nursing. Associate Professor at the Nursing Department at UnB. Brasília, Distrito Federal, Brazil. E-mail: valeriabertonha@gmail.com. ORCID iD: https://orcid.org/0000-0003-1106-4571
*****Nurse. Doctor of Nursing. Professor at the Centro Universitário Sudoeste Paulista. Itapetininga, São Paulo, Brazil. E-mail: claucyrino@gmail.com. ORCID iD: orcid.org/0000-0003-2442-2606
******Nurse Doctor of Nursing Professor at the Nursing Department at UnB. Brasília, DF, Brazil. E-mail: juenf_andrade@yahoo.com.br. ORCID iD: http://orcid.org/0000-0002-3421-0118

invasive medical interventions[5]. It is noteworthy that military professionals perform only basic life support, being responsible in the APH for the rescue and promotion of access to emergency medical services or transportation to health care centers[6].

The care of the young population in this scenario needs to be highlighted, since it is mostly affected by incidents resulting from external causes and which have a consequent social and economic impact. It is a population of working age and the number of hospitalizations, permanent sequelae and absenteeism have high costs for society[7]. According to the Youth Statute, Law no. 12,852/2013 the young population, include people between 15 and 29 years of age[8].

In 2015, around three million young people died worldwide, and external causes represented the highest percentage of mortality in this age group[9]. In the same year, 75,692 young people died in Brazil and, of these, 48,119 happened due to external causes; in the FD, of the 819 youth deaths, 70% resulted from external causes[10].

The group of damages caused by external causes includes traffic accidents, homicides, aggression, falls, drowning, poisoning, suicides, burns, and injuries resulting from natural disasters, such as floods and/or landslides[11,12]. However, this population can also be affected by clinical events; for example, conditions such as seizure, abdominal and chest pain, dyspnea, anxiety crisis and hypoglycemia[2].

An integrative review points out that national and international surveys present the epidemiological profile of the entire population attended at the ambulance pre-hospital service, as well as the profile of victims affected by trauma[13]. Therefore, it is believed that knowing the incidents attended by the Fire Department can provide the planning of actions and strategies aimed at the prevention of injuries, the elaboration of health programs and the improvement of the quality of the assistance offered, both in the APH, as in other services belonging to the Emergency Care Network[14]. Such data can also provide the identification of weaknesses in the work process and the systematization of information in this service.

Given the above, the question is: What are the most prevalent types of pre-hospital care in young people? What is(are) the difference(s) between the types of assistance and the characteristics of the victim and the incident? Based on this research question, this study aims to describe the types of pre-hospital care for young people, performed by the Fire Department, and compare them according to the characteristics of the victims and the incidents.

METHOD

This is a cross-sectional, retrospective, descriptive and analytical study, with a quantitative approach, which is part of a larger study entitled "Profile of Pre-Hospital Care carried out by the Federal District's Fire Department", carried out in the Emergency Care Group Pre-Hospital (GAEPH) of the CBMDF.

In this research, the Pre-Hospital Care Forms(FAPH) of the services performed by the 6th Military Firefighter Group (GBM), of a clinical or traumatic nature, in a young audience (15 to 29 years old), from January 1stto December 31st2015, were included. The year 2015 was included due to the greater availability of data. FAPH with incomplete data, which made categorization impossible, were excluded from the study.

It is worth mentioning that, in FAPH of the CBMDF, the incidents are divided into clinical or traumatic. Thus, for the type of care variable, the psychiatric and gynecological obstetric categories were performed based on clinical conditions, in a manner to not overlap.

In 2015, 6th GBM of CBMDF performed a total of 1,104 visits, of which 33 FAPH had a blank "age" field and 175 did not have some other information recorded, such as the incident's location, patient severity and the time intervals of the incident. In addition, 698 FAPH were from a population outside the age range included. Thus, 906 FAPH were excluded, totaling a final sample of 198 attendance files.

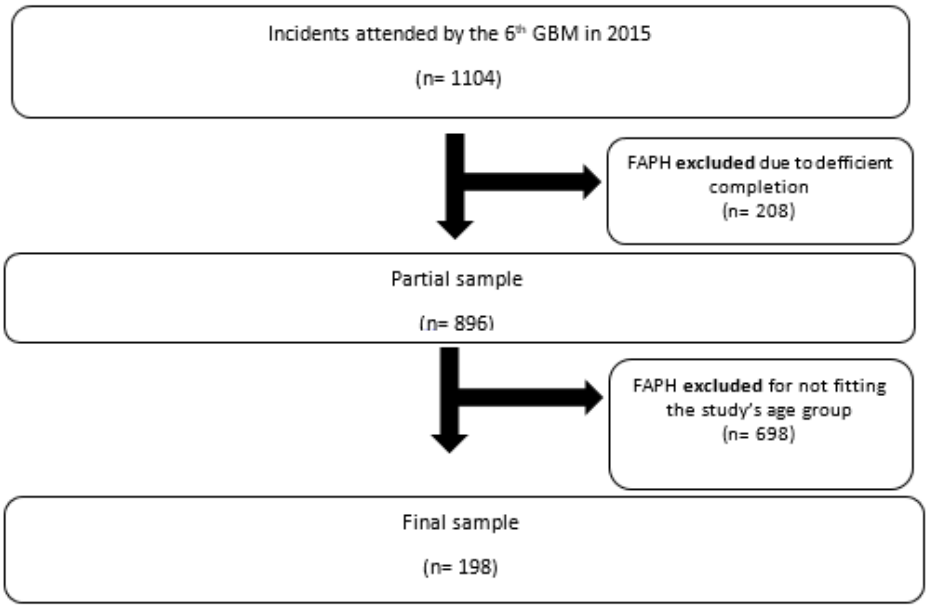

Figure 1. Flowchart of the sample gathering. Brasilia, 2019

As the 6th GBMis located in the Administrative Region of Núcleo Bandeirante, it belongs to the Center-South health region, which is composed of 17 Basic Health Units, 5 Psychosocial Care Centers (CAPS), the Regional Hospital of Guará and the Emergency Unit (UPA) of Núcleo Bandeirante[15].

Besides the regions, the Hospital de Base do Distrito Federal (HBDF), the Hospital São Vicente de Paulo (HSVP), the Hospital Materno-Infantil de Brasília and the Hospital de Apoio de Brasília (HAB) were classified as District Referral Units (URD), serving the entire population of the Federal District (FD)[16], being a referral for polytrauma[15].

Data collection was performed by undergraduate nursing students from a federal public university, previously trained for this purpose, from May to November 2017, using the CBMDF FAPH. It is noteworthy that the FAPH are forms that are hand-filled out by CBMDF military personnel when answering the incidents and are subsequently forwarded to GAEPH by the GBM of origin, for filing.

The data collection instrument was created by the researchers, after outlining the variables necessary to achieve the proposed objective.

The variables under study were: age (<18 years, ≥ 18 years); sex (female, male); attendance hours (day, night); days of the week (weekday, weekend); year period of the incident (1st, 2nd, 3rd or 4th quarter) and response time (≤ 10 minutes, from 11 to 15 minutes, from 16 to 20 minutes, from 21 to 30 minutes, from 31 to 60 minutes) - the response time of the vehicle is defined as the interval between the call to the ambulance service; that is, from the request for help until the arrival of the vehicle at the incident scene[17].

Moreover, the following were considered: the place of the incident (residence, work, route, others); severity according to the C.U.P.S scale (critical, unstable, potentially unstable, stable)[18]; the type of care (trauma, clinical, gynecological-obstetric, psychiatric) and destination (not transported, Central-North Health Region, Central-South Health Region, South Health Region, Southwest Health Region, private health network, URD).

According to the Ambulance Service Guidelines of the Federal District's Fire Department, the C.U.P.S is applied to determine how long the patient remains in the emergency room, according to the severity of the injuries or illness. Patients are characterized as: "critical", when in cardiac arrest;

"unstable", which has one or more of the following signs or symptoms - unconsciousness, decompensated shock, severe breathing difficulties, severe head and/or chest injury; "potentially unstable", with compensated shock or with significant isolated injuries. Patients with minor injuries and normal vital signs are characterized as "stable"[18].

As for the assessment time at the scene, critical and unstable patients should be treated, at the most, in five minutes and transported immediately. In the case of potentially unstable and stable patients, the time to assess the emergency is 2 minutes at the most and transport them after their stabilization[18].

The data were entered in a spreadsheet in the Microsoft Excel® Program and processed, in double entry, to verify the internal consistency between the two bases.

The descriptive study of categorical variables was carried out through the distribution of absolute and relative frequencies. To compare the studied variables, Pearson's chi-square test and likelihood ratio were applied, adopting ap<0.05 significance level. The analyzes were performed using the Statistical Package for Social Sciences (SPSS) software, version 22.0.

The project was submitted to and evaluated by the Research Ethics Committee of the Education and Research Foundation in Health Sciences, of SESDF, with favorable Opinion no. 1,757,394 and CAAE No. 56437316.2.0000.5553.

RESULTS

In the analysis of the 198 incidents included in this investigation, 86.4% of the young people attended were over 18 years old and 54.0% were male; for both variables, the comparison with the type of care was significant ($p \leq$ 0.0001) in the trauma category. It is also noteworthy that 166 (83.8%) visits had arescue response time of less than 10 minutes (Table 1).

The data showed that 47.5% of the rescues were carried out on public roads, and of these, 90.4% comprised the traumatic type (Table 1). It should be noted that 81 (69.2%) traumatic incidents consisted of vehicle accidents, motorcycle accidents and being run over (data not shown in the table).

Regarding the severity and region of destination of the victims, 98.0% of the individuals assisted were stable, according to the C.U.P.S scale, and 88.8% were referred and allocated among three regional - URD (34.8%), Central-South Health Region (30.3%) and Central-North Health Region (23.7%) -, showing a significant comparison between the type of care and regional health ($p \leq$0,0001). The North, East and West Health Regions did not admit any of the victims served by the 6th GBM in 2015.

Table 1. Characteristics and comparison of incidents attended by 6th Military Firefighter Group of the Federal District in 2015, according to the nature of the service. Federal District, 2019

Variables			Type of careprovided								Test value	*p*
			Trauma		Clinical		Gynecological obstetric		Psychiatric			
	Total	%	n	%	n	%	n	%	n	%		
Age												
<18 years	27	13.6	12	44.4	15	55,6	0	0.0	0	0.0		
≥18 years	171	86.4	105	61.4	35	20.5	21	12.3	10	5.8	19.264†	**≤0.0001**
Sex												
Female	91	46.0	32	35.2	36	39.6	21	23.1	2	2.2		
Male	107	54.0	85	79.4	14	13.1	0	0.0	8	7.5	57.370§	**≤0.0001**
Attendance hours												
Day	120	60.6	69	57.5	35	29.2	13	10.8	3	2.5	5.917§	0.116
Night	78	39.4	48	61.5	15	19.2	8	10.3	7	9.0		
Days of theweek												
Week days	143	72.2	86	60.1	37	25.9	14	9.8	6	4.2	1.242§	0.743
Weekends	55	27.8	31	56.4	13	23.6	7	12.7	4	7.3		

To be continued

Year period of the incident												
1st quarter	55	27.8	32	58.2	17	30.9	3	5.5	3	5.5		
2nd quarter	58	29.3	34	58.6	14	24.1	6	10.3	4	6.9	6.579†	0.681
3rd quarter	34	17.2	18	52.9	8	23.5	7	20.6	1	2.9		
4th quarter	51	25.8	33	64.7	11	21.6	5	9.8	2	3.9		
Rescue response time												
≤ 10 minutes	166	83.8	97	58.4	43	25.9	18	10.8	8	4.8		
From11 to 15 minutes	19	9.6	13	68.4	4	21.1	2	10.5	0	0.0		
From 16 to 20 minutes	8	4.0	5	62.5	1	12.5	1	12.5	1	12.5	10.677†	0.557
From 21 to 30 minutes	3	1.4	2	66.7	1	33.3	0	0.0	0	0.0		
From 31 to 60 minutes	2	1.0	0	0.0	1	50.0	0	0.0	1	50.0		
Place of incident												
Home	40	20.2	8	20.0	12	30.0	14	35.0	6	15.0		
Work	17	8.6	8	47.1	6	35.3	3	17.6	0	0.0		
Publicroad	94	47.5	85	90.4	7	7.4	0	0.0	2	2.1	105.651†	**≤0.0001**
Other	47	23.7	16	34.0	25	53.2	4	8.5	2	4.3		
Severity												
Critical	2	1.0	2	100.0	0	0.0	0	0.0	0	0.0		
Unstable	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4.266†	0.641
Potenciallyunstable	2	1.0	2	100.0	0	0.0	0	0.0	0	0.0		
Stable	194	98.0	113	58.2	50	25.8	21	10.8	10	5.2		
Health Regional												
Nottransported	7	3.5	6	85.7	1	14.3	0	0.0	0	0.0		
Central-North	47	23.7	31	66.0	4	8.5	11	23.4	1	2.1		
Central-South	60	30.3	5	8.3	38	63.3	10	16.7	7	11.7	164.182†	**≤0.0001**
South	2	1.0	2	100.0	0	0.0	0	0.0	0	0.0		
South-west	6	3.0	4	66.7	0	0.0	0	0.0	2	33.3		
Private health network	7	3.5	2	28.6	5	71.4	0	0.0	0	0.0		
URD*	69	34.8	67	97.1	2	2.9	0	0.0	0	0.0		

*District Referral Units *§* Pearson's Chi-square test † Likelihood Ratio

DISCUSSION

This research allowed to describe and compare the profile of pre-hospital care provided to young people by the 6th GBM of CBMDF, which enables to broaden the understanding of these services, with a view to directing actions on prevention and promotion, as well as adjustments in the work process of that service.

In this investigation, it is highlighted that young men from 18 to 29 years of age, male, have greater exposure to traumatic injuries than the rest of the population under study. This fact can be explained by the social and cultural behavior of the male population, characterized by greater exposure to risks, such as: speeding; alcohol abuse; a more aggressive behavior in traffic; performing risky maneuvers; among other attitudes that predispose accidents; besides the severe and aggressive behavior related to urban violence, making them its agents, but which, on the other hand, make them targets[19].

Such data are confirmed by other studies[20,21]. One of them explains that 77.5% of the rescues of traumatic incidents were to male victims, and 52.2% of these incidents included victims in the age group from 15 to 34 years - which proves a predominance of young adults at active age[20]–, generally related to the use of a cell phone while driving, speeding and exhausting work shifts[19].

Regarding the response time, in the present investigation, 166 (83.8%) achieved a time shorter than ten minutes. A study carried out in the city of Melbourne, Australia, showed that 75.0% of the care to critically ill patients had a

response time of less than 14 minutes[22]. A survey in southern Brazil considered the time interval of 8 to 10 minutes as an ideal interval[17].

Furthermore, as the main indicator of the quality of pre-hospital care, the response time of mobile services has attracted public interest in developed countries[22]. The importance of professionals' perception of response time as a parameter for service quality is emphasized. Qualitative research carried out in Maringá showed that 41% of the professionals considered the ambulance's response time to be "good" at the place of the incident and 15.5% considered it "excellent"[23].

In the place of incident analysis, 94 (47.5%) rescues were made on public roads. Of these, 90.4% were related to traumatic events, with a significant *p*. Such data may be related to the substantial increase in the number of cars on public roads, and its use as a means of transportation, both for commuting to work, and for pubs, parties and other places with access to alcoholic beverages[24].

Studies[7,21] on the theme show that the traumas are mostly due to traffic accidents, highlighting the motorcycle as the main vehicle involved. An integrative review has shown that visits related to traffic accidents have been the main target of studies in recent years, and, despite the increase in the number of rescues related to such injuries, the lethality caused by these accidents has decreased[13].

In this perspective, almost all the incidents analyzed (98%) were of stable victims, according to the C.U.P.S scale used by CBMDF. Such a result can be confirmed, since the team performs basic life support services, leaving the population with hemodynamic problems and in need of immediate invasive intervention under the responsibility of SAMU, as decided by the Integrated Medical Regulation Center. Besides, users constantly use emergency services inappropriately, - with generic and low severity complaints, which could be solved in another service in the care network, causing the inappropriate displacement of resources[20].

Of the trauma victims, 97.1% were referred to the URD, and it must be considered that HBDF, a reference for polytrauma in the FD, is one of these units. As for clinical care, 63.3% were referred to the Center-South Health Region, due to the proximity of the coverage area of the 6th GBM. The North, East and West Health Regions did not receive any of the victims assisted in 2015, which can be justified by the distance of these health services from the group's service area.

As limits of this research, it is important to highlight the inadequate and deficient filling of the attendance forms, reflecting on the sample composition. Studies whose data are based on such records can be affected, since they are filled out after care is provided, and may have some missing information[25]. The continuing education of professionals, both for assistance and bureaucratic issues, reflects on the quality of the service[23].

The contribution of the research to the institution is emphasized, since the characterization of the assistance provided can guide the decision-making and the planning of intervention strategies of this and other groups of the fire department, aiming at a qualified and specific health care provided to the young people.

CONCLUSION

It is concluded that the young population under study, with an emphasis on the male sex, is vulnerable to traumatic events, specifically to rescuing in the public road, possibly caused by traffic accidents.

Thus, the data exposed points to the need for health education, and intersectoral actions that promote the prevention of these incidents in the young population. It is also highlighted the need for continuing education of military professionals concerning the proper filling out of attendance forms, improvement of these forms and the development of automated systems for continuous analysis of information.

Thus, it is recommended to carry out research that allows the development of an integrated automated system for the Urgency and Emergency Care Network (RUE), allowing the comparison of data, analysis and contributions for planning and decision making.

RESUMO

Objetivo: Descrever os tipos de atendimentos pré-hospitalares dejovens, realizados por um Grupamento do Corpo de Bombeiro, e compará-los segundo as características das vítimas e das ocorrências**. Método:** Estudo transversal, retrospectivo, descritivo e analítico, com abordagem quantitativa, composto por 198 ocorrências atendidas, em 2015, no Distrito Federal. Os dados foram coletados a partir das fichas de atendimentos do serviço. Para comparação proposta, aplicou-se o teste qui-quadrado e a razão de verossimilhança, adotando-se p<0,05. **Resultados:** A maioria dos atendidos era do sexo masculino (54,0%) e idade superior a 18 anos (86,4%). Predominaram-se os atendimentos com tempo de resposta menor que 10 minutos (83,8%) e gravidade classificada estável (98,0%). O resultado da comparação foi significativo para a categoria trauma quanto às características de idade, sexo, local de ocorrência e regional de destino, todas com p≤0,0001. **Conclusão:** A população jovem estudada, com ênfase ao sexo masculino, é vulnerável a ocorrências traumáticas, especificamente aos atendimentos ocorridos em via pública. Os dados expostos apontam para a necessidade de educação em saúde e ações intersetoriais que promovam a prevenção dessas ocorrências na população jovem.

Palavras-chave: Assistência pré-hospitalar. Perfil de saúde. Necessidades e demandas de serviços de saúde. Adulto jovem.

ATENCIONES PRE HOSPITALARIAS EN POBLACIÓN JOVEN DEL DISTRITO FEDERAL

RESUMEN

Objetivo: describir los tipos de atenciones pre hospitalarias de jóvenes, realizadas por un Agrupamiento de Cuerpo de Bombero, y compararlos según las características de las víctimas y de los incidentes. **Método:** estudio transversal, retrospectivo, descriptivo y analítico, con enfoque cuantitativo, compuesto por 198 incidentes atendidos, en 2015, en el Distrito Federal-Brasil. Los datos fueron recolectados a partir de las fichas de atención de servicio. Para la comparación propuesta, se aplicó la prueba chi-cuadrado yla razón de verosimilitud, adoptándose p<0,05.**Resultados:** la mayoría de los atendidos era del sexo masculino (54,0%) y edad superior a 18 años (86,4%). Se predominaron las atenciones con tiempo de respuesta menor que 10 minutos (83,8%) y gravedad clasificada estable (98,0%). El resultado de la comparación fue significativo para la categoría trauma en cuanto a las características de edad, sexo, local de incidencia y regional de destino, todas con$p$≤0,0001. **Conclusión:** la población joven estudiada, con énfasis al sexo masculino, es vulnerable a incidentes traumáticos, específicamente a los atendimientos ocurridos en vía pública. Los datos expuestos señalan para la necesidad de educación en salud y acciones intersectoriales que fomenten la prevención de estos incidentes en la población joven.

Palabras clave: Atención pre hospitalaria. Perfil de salud. Necesidades y demandas de servicios de salud. Adulto joven.

REFERENCES

1. Ministério da Saúde (BR). Portaria nº 288, de 12 de março de 2018. Redefine a operacionalização do cadastramento de serviços de atendimento pré hospitalar móvel de urgência e o elenco de profissionais que compõem as equipes do Serviço de Atendimento Móvel de Urgência (SAMU 192) no Cadastro Nacional de Estabelecimentos de Saúde (CNES). Diário Oficial da União, Brasília, DF, 29 mar. 2018. p. 83. Disponível em: http://bvsms.saude.gov.br/bvs/saudelegis/sas/2018/prt0288_29_03_2018.html.
2. Almeida PMV, Dell'Acqua MCQ, Cyrino CMS, Juliani CMCM, Palhares VC, Pavelqueires S. Analysis of services provided by SAMU 192: Mobile component of the urgency and emergency care network. Esc. Anna Nery [Internet]. 2016; 20(2): 289-295 [acesso em 15 de jul 2020]. DOI: https://doi.org/10.5935/1414-8145.20160039.
3. Ministério da Saúde (BR). Portaria nº 1.600, de 7 de julho de 2011. Reformula a Política Nacional de AtençãoàsUrgências e institui a Rede de AtençãoàsUrgências no Sistema Único de Saúde (SUS). Diário Oficial da União, Brasília, DF, 08 jul. 2011. p. 70. Disponível em: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2011/prt1600_07_07_2011.html.
4. Governo do Distrito Federal. Portaria-Conjunta n. 4 de 05 de setembro de 2011. Dispõe sobre o serviço de atendimento pré-hospitalar do Corpo de Bombeiros Militar do Distrito Federal. Diário Oficial do Distrito Federal, Brasília, DF, 05 set. 2011. p. 13. [Disponível em: http://www.sinj.df.gov.br/sinj/Norma/69281/64059822.html
5. Alkmin T, Souza RD, Feijó EJ, Parrila GS, Santos RS. A atuação do enfermeiro à frente da ambulância intermediária no atendimento pré-hospitalar móvel do Corpo de Bombeiros do Estado do Rio de Janeiro. Revista de Trabalhos Acadêmicos UNIVERSO São Gonçalo [Internet]. 2016; 1(1) [acesso em 28 nov 2018]. Disponível em: http://revista.universo.edu.br/index.php?journal=2TRABALHOSACADEMICOSAOGONCALO2&page=article&op=view&path%5B%5D=2800
6. Freitas KO, Martins MGT, Silva MSA, Jaques MB, Vasconcelos EV. Health Care from Firefighters: the Faced Difficulties that Impact in the Population's Assistance. Rev Fund Care Online [Internet]. 2019. 11 (n. esp): 317-323 [acessoem 21 mar 2019]. DOI: http://dx.doi.org/10.9789/2175-5361.2019.v11i2.317-323
7. Gomes ATL, Silva MF, Dantas BAS, Miranda JMA, Melo GSM, Dantas RAN. Perfil epidemiológico de lasemergencias traumáticas asistidas por unservicioprehospitalariomóvil de urgencia. Enfermería Global. 2016; 16(1), 384-415. DOI: https://doi.org/10.6018/eglobal.16.1.231801.
8. Brasil. Presidência da República. Lei n. 12.852 de 05 de agosto de 2013. Institui o Estatuto da Juventude e dispõe sobre os direitos dos jovens, os princípios e diretrizes das políticas públicas de juventude e o Sistema Nacional de Juventude - SINAJUVE. Diário Oficial da União 05 ago. 2013; Seção 1. Disponível em: http://www.planalto.gov.br/CCIVIL_03/_Ato2011-2014/2013/Lei/L12852.htm
9. World Health Organization (WHO) [homepage na

internet] Global Health Estimates 2015: Estimated deaths by age, sex, and cause [acessoem 18 dez 2018]. Disponível em: https://www.who.int/healthinfo/global_burden_disease/en/

10. Ministério da Saúde (BR). Departamento de Informática do Sistema Único de Saúde – DATASUS [homepage na internet]. Informações de Saúde, Estatísticas Vitais: Banco de Dados. [acesso em 13 nov 2018]. Disponível em: http://www2.datasus.gov.br/DATASUS/index.php?area=0205

11. Sousa ASB, Silva SC, Cavalcante MFA. Mortalidade por causas externas em adultos jovens em Teresina-PI no período de 2001-2011. R. Interd. 2016; 9(1): 57-65. Disponível em: https://revistainterdisciplinar.uninovafapi.edu.br/index.php/revinter/article/view/594/pdf_285

12. Preis LC, Lessa G, Tourinho FSV, Santos JLG. Mortality epidemiology for external causes in the period 2004 to 2013. Rev enferm UFPE on line [Internet]. 2018; 12(3): 716-28 [acessoem 19 jul 2020]. DOI:https://doi.org/10.5205/1981-8963-v12i3a230886p716-728-2018

13. Cyrino CMS, Almeida PMV de, Dell'Acqua MCQ, Deodato S, Michelin NS, Castro MCN e. Mobile pre-hospital care in Portugal and Brazil: an integrative review. Cogitareenferm. [Internet]. 2019; 24 [acesso em 18 jan 2019]. DOI: http://dx.doi.org/10.5380/ce.v24i0.61194

14. Soares MKP, Dantas RAN, Dantas DV, Nunes HMA, Nascimento RA, Nascimento JCP. Profile of users attended by an emergency mobile pre-hospital service in northeastern Brazil. Rev Fund Care Online [Internet]. 2018; 10(2):503-509 [acessoem 06 dez 2018]. DOI: http://dx.doi.org/10.9789/2175-5361.2018.v10i2.503-509

15. Governo do Distrito Federal. Secretaria de Estado da Saúde do Distrito Federal. Plano Distrital de Saúde 2016-2019. Brasília; 2016. Disponível em: https://www.conass.org.br/pdf/planos-estaduais-de-saude/DF_PDS_2016-2019_OFICIAL_Parte_I.pdf

16. Fonseca HLP. The Health Reform of Brasília, Brazil. Ciênc. saúde coletiva [Internet]. 2019; 24(6): 1981-1990 [acesso em 27 nov 2018]. DOI: http://dx.doi.org/10.1590/1413-81232018246.07902019

17. Ciconet RM. Tempo resposta de um Serviço de Atendimento Móvel de Urgência. Tese [Doutorado em Enfermagem] – Porto Alegre: Escola de Enfermagem, Universidade Federal do Rio Grande do Sul; 2015 [acesso em 23 dez 2018]. Disponível em: https://www.lume.ufrgs.br/handle/10183/129481

18. Governo do Distrito Federal. Corpo de Bombeiros Militar do Distrito Federal. Manual de Atendimento Pré-Hospitalar. Brasília: Corpo de Bombeiros Militar do Distrito Federal, 2007. 239 p. [acesso em 12 jul 2020]. Disponível: https://www.cbm.df.gov.br/2012-11-12-17-42-33/2012-11-13-16-14-57?task=document.viewdoc&id=753.

19. Barreto MS, Teston EF, Latorre MRDO, Mathias TAF, Marcon SS. Traffic accident and homicide mortality in Curitiba, Paraná, Brazil, 1996-2011. Epidemiol. Serv. Saúde [Internet]. 2016; 25(1): 95-104 [acesso em 02 jan 2019]. DOI: https://doi.org/10.5123/s1679-49742016000100010.

20. Dias JMC, Lima MSM, Dantas RAN, Costa IKF, Leite JEL, Dantas DV. Profile of state prehospital mobile emergency care service. CogitareEnferm. [Internet]. 2016; 21(1): 01-09. [acesso em 23 dez 2018]. DOI: http://dx.doi.org/10.5380/ce.v21i1.42470

21. Mbanjumucyo G, George N, Kearney A, Karim N, Aluisio AR, Mutabazi Z et al. Epidemiology of injuries and outcomes among trauma patients receiving prehospital care at a tertiary teaching hospital in Kigali, Rwanda. African Journal of Emergency Medicine. (2016) 191–197. DOI: http://dx.doi.org/10.1016/j.afjem.2016.10.001

22. Nehme Z, Andrew E, Smith K. Factors Influencing the Timeliness of Emergency Medical Service Response to Time Critical Emergencies. Prehospital Emergency Care. 2016; 20(6): 783-791. DOI: http://dx.doi.org/10.3109/10903127.2016.1164776

23. Garçon TL, Pupulim JSL. Quality of emergency in mobile prehospital care in the perspective of professionals. Cienc. Cuid. Saúde [Internet]. 2017; 16(4) [acesso em 05 nov 2018]. DOI: http://dx.doi.org/10.4025/cienccuidsaude.v16i4.37306

24. Geiger LSC, Chavaglia SRR, Ohl RIB, Barbosa MH, Tavares JL, Oliveira ACD. Trauma from traffic accidents after implementation of Law nº. 11.705 - "Dry Law". Rev Min Enferm. 2018; 22:e-1072. DOI: http://www.dx.doi.org/10.5935/1415-2762.20180002

25. Hagiwara MA, Nilsson L, Strömsöe A, Axelsson C, Kängström A, Herlitz J. Patient safety and patient assessment in pre-hospital care: a study protocol. Scand J Trauma ResuscEmerg Med. 2016; 24(14). DOI: http://dx.doi.org/10.1186/s13049-016-0206-7

Corresponding author: Lucas Vicente de Sousa. SHCES Quadra 1105 Bloco D Apto 302. Brasília, Distrito Federal, Brasil. Telefone: (61) 98212-4418. E-mail: lucasvdesousa@gmail.com.

Submitted: 22/11/2019
Accepted: 10/07/2020