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58 - CHARACTERISTICS OF CLINICAL AND TRAUMA CARE IN THE MOBILE URGENCY CARE SERVICE IN NATAL/RN

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INTRODUCTION

The transportation of persons to the hospital environment constitutes a need among all peoples. The concern of associating initial life-saving care and victim transportation up until the arrival in a hospital appeared in France during the French Revolution in the eighteenth century, by initiative of the medicine student Dominique Larrey (SOARES, 2000).

From this period onwards, the methods of emergency care underwent deep changes, and nowadays, beyond the concern of immediate care in order to avoid death, actions are taken to avoid handicaps that the victim might suffer from after an incident (DIVINO, 2006).

In this sense, the Ministério da Saúde (Health Ministry) instituted the national policy of attention to urgency, on September 29, 2003, through Portaria n°. 2863, considering the high mortality rates in the country, caused by both circulatory diseases, which constitute the main cause of death in Brazil, as well as external cause (EC)-provoked deaths (BRASIL, 2003a)

This policy's enabling, nationally instituted by Portaria n°. 1864, took place through the Mobile Urgency Care Service (Serviço de Atendimento Móvel de Emergência – SAMU), which can be called on through phone number 192 (BRASIL, 2003b). This model of pre-hospital care (PHC) is available 24 hours a day and aims to improve quality of assistance to trauma victims and specialized care to people undergoing clinical emergencies in general, performing fast and early care in the incident's location.

The SAMU Service is thus performed in two modes: basic life support (BLS), which includes no invasive maneuvers; and advanced life support (ALS), which allows invasive ventilator and circulatory procedures (SANCHES; DUARTE; PONTES, 2009).

According to Portaria n.° 2048/GM of the Ministério da Saúde, from November 5, 2002, qualified professionals must be available in SAMU's vehicles. In the BLS ambulances a driver and nursing technician must be available; whereas in the ALS ambulances the team must contain a physician, a nurse and a driver (BRASIL, 2002).

In order to assist the service's work, a Medical Regulation Center (Central de Regulação Médica) is created, in order to organize the response to all urgency situations whether they need medical care or not, allowing the rationalization of resources and thus functioning as the service's coordinator and enabler desk. Its functions are the technical evaluation of the rescue request's gravity, the management of available means for care giving and the selection and contact with the specialized unit receiving the patient (CONSELHO FEDERAL DE MEDICINA, 1998).

Therefore, given SAMU's functions and attributions, we understand it's capable of promoting service structuring as it executes the distribution of victims to fixed units, avoiding the depletion of emergency rescue wards, reducing mortality and handicaps on the pre-hospital environment. Furthermore, it works in the observation of the local health system, identifying and providing epidemiological data about the assisted population, assisting on the planning of actions that promote health system improvements.

Given this scenery involving mobile pre-hospital care (PHC) and, given the presupposition that by knowing the health hazards' causal and contextual reality, we can create directional attention measures, the following objectives were elaborated: to identify the shift in which the most care procedures are performed by SAMU/Natal; to characterize the clinical and trauma injuries according to type, frequency and gender.

MATERIAL AND METHOD

Descriptive type study, with quantitative approach and retrospective data collected from the SAMU/NATAL, RN database. The research was performed in the Medical Regulation Center from SAMU/NATAL, which offers 24-hours-a-day medical urgency care to the population, according to the rules in the Ministry of Health's Portaria n.° 2048/GM, from November 05, 2002. The central has 12 ambulances, 09 of which for basic support and 03 for advanced support as well as 07 new motorcycle ambulances driven by nursing technicians and rescuers. An average of 5.5 thousand monthly care procedures are performed (NATAL, 2009).

The study population was constituted of all procedures performed (received calls) by SAMU/Natal which resulted on dislocation and local intervention by the health team – rescuer, nursing technician, nurse, physician – excluding from the analysis the responses that only resulted in medical advice over the telephone and intra-hospital transfers, in the period of February 2007 to February 2008, in a total of 16,185 calls.

To that end, a previously structured for containing questions regarding demographic variables (age, gender, time of the year and rescue location) and epidemiological variables (clinical and trauma injuries) was used. The institution being studied has a computerized system through which all rescue requests and information are recorded. In order to proceed with data collection, we followed the legal and ethical principles regarding research on human beings set by Resolução n°. 196/96 of Conselho Nacional de Saúde, after approval by the registration protocol in the Comitê de Ética e Pesquisa (CEP) from Hospital Universitário Onofre Lopes, Protocolo n°. 153/07 (BRASIL, 2000). The data were electronically categorized and processed through Microsoft Excel XP and Statistica 6.0 software, and analyzed through descriptive statistics.

RESULTS AND DISCUSSION

Before beginning the presentation and discussion of data proper, some clarifications on the collected data must be made. Thus, given the service's emergency characteristics and busy flow in which the information regarding incidents are exchanged, data such as age, mortality, level of consciousness are often not contemplated or exceedingly incomplete or dubious in the database, making its categorization and resulting analysis impossible.

Similarly, the data referring to the injuries' characteristics are superficial and generic, lacking any pattern of injury characterization or reference to injuries according to the International Classification of Diseases (ICD).

This fact made the classification of care more difficult, classifying clinical injuries in a general sense as related to the

reater organic systems – cardio-vascular, digestive, genital-urinary, neurological, muscular, respiratory, reproductive (obstetric) and metabolic. The ECs were classified generically, obeying the predominance of terms found in the database – drowning, physical aggression, vehicle rollover, collision/running over, electrocution, melee weapon wound (MWW), firearm wound (FAW), falling and burn. For the inclusion of injuries which could not be categorized due to imprecision in the database, the "other" category was created, present both on clinical injuries as well as ECs.

Thus, regarding time of rescue and even occurrence weekday, we can observe most are concentrated in the daytime period, with 9.820 (61.7%) of the rescues, and Sunday is the day when most occurrences were registered totaling 2,866 (16.6%).

Likewise, on studies performed by Pereira; Lima (2006) and Aquino (2007), the care given by SAMU services in the cities of Londrina/PR and Florianópolis/SC, respectively, were spread across the weekdays with a relative concentration on weekends. In agreement with our data, on both works, a greater number of calls was taken in the daytime period, making up 61.5% in Londrina and 57.9% in Florianópolis. Ladera and Barreto (2008) confirm the daytime period as the one with most calls.

Regarding the distribution of clinical and trauma injuries, we saw 9,877 (60.4%) of records were of clinical injuries, whereas trauma totaled 6,407 (39.6%) calls. An intrinsic relationship of the gender factor with certain injuries was observed, with female population more commonly registering clinical injuries, represented by 54.0% (5,281) of the cases, which totaled 44.3% (4,334) of the male population injuries.

Among clinical causes, the most common in both genders were, in decreasing order, metabolic injuries with 1,801 (28.1%), respiratory complications with 1,669 (26.0%), psychiatric disturbances with 1,456 (22.7%), and cardiovascular disturbances with 1.242 (19.4%) events.

These results are similar to the data presented by the Cadernos de Informação de Saúde para o Brasil (Health Information Notebooks for Brazil) (BRASIL, 2009), which emphasize the relative reduction of hospital morbidity due to infectious disease and the increase of respiratory (13.7%) and cardio-vascular (10.2%) disease.

In our study, when separating cardio-vascular disease (CVD) by gender, we observed a significant majority in the female population, compared to the males, with 665 (53.5%) women for 562 (10.2%) men.

According to data from the World Heart Federation, CVD are the main causes of death among women in the entire world (WIEGOSZ, 2005). In Brazil, according to the Ministério da Saúde (MS), three deaths due to myocardial infarction occur for every breast cancer death (BRASIL, 2009).

Azambuka et al. (2008) report that, in Brazil, on 2003, CVD were responsible for 30% of all deaths on women and 26% on men in aged 35 to 64. In the age group of 65 and above, CVD remain responsible for more deaths on women than on men (35% women and 31% men). According to authors, deaths during hospitalization due to CVD affected 56.9% of women and 50.0% of men aged 35 to 64.

On the other hand, a study performed by Mourão et al. (2008) on the characteristics of deaths by DVC in Ceará detected a prevalence of the male population (57.1%) as the main victims of cardio-vascular system diseases. Romanzini et al. (2008) found in their research that the male gender has a greater aggregation of behavioral risk factors for this disease, such as feeding, physical exercise and smoking.

Likewise, psychiatric injuries prevailed on the female population with 717 cases (49.2%) and male with 675 (46.3%) injuries. Andrade, Viana and Silveira (2006) explain that the higher number of psychiatric events on women is a consequence of the females' greater vulnerability to anxiety and depression symptoms, especially those associated with the reproductive period, commonly presenting schizophrenic, bipolar affective and obsessive compulsive disturbances.

Regarding trauma injuries, there was a predominance of the male population, with a record of 4,617 (72.1%) procedures compared to the female with 1,351 cases (21.1%), with a predominance of collisions with 2,335 events (36.4%) caused by traffic accidents (TAs). It's important to remember, according to ICD-10, running over is a type of collision involving a vehicle and a pedestrian. All accidents resulting from running over were thus included in the collision category. Falling is also an important category (33.2%), involving several types such as motorcycle, bicycle, level, and own height, not separated in categories due to a lack of information in the SAMU/Natal database.

Regarding gender, Andrade and Mello Jorge (2000) comment that male predominance is a strong characteristic of TAs, signaling once more the males' greater exposition factor, as well as this group's more aggressive behavior in traffic. Farias et al. (2009), when analyzing TAs in an urgency hospital in Natal/RN, observed that among 605 victims 82.8% were male and 17.2% female. This preponderance was also observed by Barros et al. (2009) regarding motorcycle accidents (88.40%).

Regarding TA type, Farias et al. (2009) noticed a predominance of collisions (61.8%), including running over, followed by falling (34.9%) and vehicle rollover (3.3%).

Regarding falls, we observe these happen more often on the elderly with the main injuries consisting of fractures, especially in the lower limbs (especially femur fractures), and lacerations. Other than these, there's a significant prevalence of cranial-encephalic trauma (FARIAS et al., 2008; GAWRYZEWSKI; MELLO JORGE; KOIZUMI, 2004).

As for the urban violence scenario, we observed in this study a significant number of violence cases, considering $1,183 \, (18.5\%)$ people suffered this type of injury. Among these, physical aggression had 546 records (46.1%), followed by MWW with 337 (28.5%) and FAW with 300 (25.3%). The amount of cases on the three cited categories is greater in male population than among females.

Collaborating with our data, a study performed by Mascarenhas et al. (2009) on the characteristics of violence cases notified by public emergency services in Brazil, in 2006, observed that out of 4,854 violence cases answered, most were classified as physical aggression (87.0%).

As in the City of Natal, a work performed by Sanches, Duarte and Pontes (2009) on FAW calls answered by the Campo Grande/MS SAMU detected that victims who suffered FAW were 3.9% (233) of calls between April 2005 and April 2007, most of which (94%) were male.

CONCLUSIONS

The care procedures performed by SAMU/NATAL were predominant in the daytime period (61.7%) with Sunday as the day with the most recorded procedures (16.6%). Regarding distribution of clinical and trauma injuries, we observed that most (60.4%) were clinical records, compared with trauma (39.6%). We detected an intrinsic relationship between the gender factor and certain injuries, with the female population more commonly affected by clinical injuries (54.0%) and the males more affected by trauma (72.1%).

Regarding clinical care procedures, the predominant types were of metabolic nature (28.1%), respiratory complications (22.7%), psychiatric disturbances (22.7%) and cardiac-vascular (19.4%). As for trauma care procedures, the predominant types were collisions (36.4%) provoked by traffic accidents, falls (33.2%) and urban violence (18.5%).

We conclude that the implementation of SAMU/Natal is a step towards meeting the needs of the population, as it

promotes integral assistance as well as offering quality care and guaranteeing immediate rescue on urgency situations. Data records, however, were perceived as a weakness to be overcome due to absent or unreferenced information.

KEYWORDS: EMERGENCY PRE-HOSPITAL CARE, MOBILE EMERGENCY UNITS, EXTERNAL CAUSES.

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REFERENCES

AQUINO, D.I., Caracterização do Serviço de Atendimento Móvel de Urgência (SAMU- 192), do município de Florianópolis/SC. 2007: 84p. Dissertação (Mestrado) – Universidade do Vale do Itajaí/SC.

ANDRADE, S.; MELLO JORGE, M.H.P. Características das vítimas por acidentes de transporte terrestre em município da Região Sul do Brasil. Rev. Saúde Pública, v.34, n.2, p.149 -156, 2000.

ANDRADE, L. H. S. G.; VIANA, M. C.; SILVEIRA, C. M. Epidemiologia dos transtornos psiquiátricos na mulher. **Rev.** psiquiatr. clín. v.33, n.2, São Paulo, 2006.

AZAMBUJA, M. I. R. et al . Impacto econômico dos casos de doença cardiovascular grave no Brasil: uma estimativa baseada em dados secundários. **Arq. Bras. Cardiol.**, São Paulo, v. 91, n. 3, Sept. 2008.

NATAL. Prefeitura do Natal. Secretaria Municipal de Saúde. Notícias. **Samu recebe sete motolâncias (13/07/09**). 2009. Acesso em: 20 de julho de 2009. Disponível em: http://www.natal.rn.gov.br/noticia/ntc-836.html.

BARROS, W.C. T. S. et al. Characterization of motorcycle accidents: a study on motorcycle drivers victimized by traffic accidents in Rio Grande do Norte. **The FIEP Bulletin**, v. 79, p. 239-242, 2009.

BRASIL. Ministério da Saúde. Portaria GM/MS nº 2048, de 5 de novembro de 2002. Aprova o

regulamento técnico dos sistemas estaduais de urgência e emergência. **Diário Oficial da União, Brasília,** DF, 12 nov. 2002. Seção 1, p. 32-54.

_____. Ministério da Saúde. Portaria GM/MS nº 1863, de 29 de setembro de 2003. Institui a Política Nacional de Atenção às Urgências, a ser implantada em todas as unidades federadas, respeitadas as competências das três esferas de gestão. **Diário Oficial da União**, Brasília, DF, 6 out. 2003a. Seção 1, p. 56.

_____. Ministério da Saúde. Portaria GM/MS nº 1864, de 29 de setembro de 2003. Institui o componente préhospitalar 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: SAMU- 192. Diário Oficial da União, Brasília, DF, 6 out. 2003b. Seção 1, p. 57-59.

_____. Ministério da Saúde. Comissão Nacional de Ética em Pesquisa – CONEP. **Normas para pesquisa envolvendo seres humanos** (Res. CNS 196/96 e outras). Brasília: 2000. (Séries Cadernos técnicos).

_____BRASIL. Ministério da Saúde. Informações de Saúde. DATASUS. Cadernos de Informação de Saúde. Cadernos para o Brasil. Brasília. DF. 2009.

CONSELHO FEDERAL DE MEDICINA-CFM. Resolução n 1.529, de 4 de setembro de1998. Normatiza atividade médica na área de urgência e emergência. Disponível em: < http://www.portalmedico.org.br/resoluçoes/cfm/.htm>. Acesso em 20 jul. 2009.

DIVINO, E. A. **Atendimento Pré-Hospitalar Móvel na Cidade do Rio Grande**: Socorro às Vítimas de Trauma. 2006. 212f. Dissertação (Mestrado em Enfermagem) – Programa de Pós-Graduação em Enfermagem, Fundação Universidade Federal do Rio Grande, Rio Grande. 2006.

FARIAS, G. M. et al. Characterization of traffic accidents: study performed on victims attended to in an emergency hospital in the greater Natal/RN. **The FIEP Bulletin**, v. 79, p. 229-231, 2009.

Perfil sócio-demográfico dos idosos com fratura de fêmur em um hospital de traumato-ortopedia de Natal/RN. In: I Forúm Internacional sobre Saúde e Envelhecimento Simpósio sobre Representações Sociais, 2008, João Pessoa-PB. **Anais** de I Forúm Internacional sobre Saúde e Envelhecimento Simpósio sobre Representações Sociais. João Pessoa-PB: Pró Reitoria de Pós-Graduação - UFPB, 2008.

LADEIRA, R. M.; BARRETO, S. M. Fatores associados ao uso de serviço de atenção pré-hospitalar por vítimas de acidentes de trânsito. **Cad. Saúde Pública**, Rio de Janeiro, v. 24, n. 2, fev. 2008.

MASCARENHAS, M. D. M. et al. Perfil epidemiológico dos atendimentos de emergência por violência no Sistema de Serviços Sentinelas de Vigilância de Violências e Acidentes (Viva) - Brasil, 2006. **Epidemiol. Serv. Saúde**, v.18, n.1, p.17-28, mar. 2009.

MOURÃO, T. C. et al. Mortalidade precoce por doenças cardiovasculares: perfil epidemiológico dos óbitos no Ceará. **REPM**, v. 2, n. 4, p. 27 - 40, 2008.

PEREIRA, W. A. P.; LIMA, M. A. D. S. Atendimento pré-hospitalar: caracterização das ocorrências de acidente de trânsito. **Acta Paul Enferm**, v. 19, n. 3, p.279-83, 2006.

ROMANZINI, M. et al . Prevalência de fatores de risco cardiovascular em adolescentes. **Cad. Saúde Pública**, Rio de Janeiro, v. 24, n. 11, Nov. 2008 .

SANCHÉS, S.; DUARTE, S. J. H.; PONTES, E. R. J. C. Caracterização das vítimas de ferimentos por arma de fogo, atendidas pelo Serviço de Atendimento Móvel de Urgência em Campo Grande-MS. **Saude soc.**, São Paulo, v. 18, n. 1, Mar. 2009.

SOARES, L. M. C. A. (Org) Manual do curso de regulação médica. In: **IV Congresso Internacional da Rede Brasileira de Cooperação em Emergência - RBCE**, 2000, São Paulo: CSI/SES, 2000, 47p.

WIELGOSZ, A. Cardiovascular Disease and the community. Prevention and Control, v. 1, n. 3, 2005.

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CHARACTERISTICS OF CLINICAL AND TRAUMA CARE IN THE MOBILE URGENCY CARE SERVICE IN NATAL/RN

ABSTRACT

The Mobile Urgency Care Service (Serviço de Atendimento Móvel de Urgência – SAMU) works 24 hours a day aiming to improve the quality of assistance to trauma victims and specialized care offered to people affected by clinical emergencies in general, providing fast and early care in the event's location. Given this scenery involving mobile pre-hospital care, this study aims to identify the shift with the most procedures performed by SAME/Natal; to characterize clinical and trauma injuries

according to type, frequency and gender. It's a descriptive type study, with quantitative approach and retrospective data collected from the SAMU/Natal, RN database. The population of the study was constituted of 16,185 procedures performed from February 2007 to February 2008. The work was approved by the record protocol in the Comitê de Ética e Pesquisa from Hospital Universitário Onofre Lopes, protocolo n°. 153/07. The results show that the care procedures were predominant in the daytime period, Sunday was the day with the most procedures, and most procedures were clinical. Regarding clinical procedures, those of metabolic nature were predominant. As for trauma procedures, collisions provoked by traffic accidents were predominant.

KEYWORDS: Emergency Pre-Hospital Care, Mobile Emergency Units, External Causes.

CARACTÉRISTIQUES DES SECOURS CLINIQUES ET TRAUMATIQUES PRÊTÉS PAR LE SERVICE D'AIDE MOBILE D'URGENCE DE NATAL/RN RÉSUMÉ

Le Service d'Aide Mobile d'Urgence (SAMU) opère 24 heures sur 24, en vue d'améliorer la qualité de l'assistance prêtée aux victimes des traumas ainsi que le secours spécialisé aux personnes concernées par les urgences cliniques en général, grâce à une intervention rapide et précoce, réalisée sur les lieux mêmes de l'accident. Face au contexte où se situe le service de l'APH mobile, ce travail a pour but d'identifier la période de la journée où le SAMU/Natal prête le plus grande nombre de secours; caractériser les accidents cliniques et traumatologiques, selon le type, la fréquence et le sexe. Il s'agit d'une étude de type descriptif, avec une approche quantitative, qui utilise des données rétrospectives rassemblées à la banque de données du SAMU/Natal, RN. La population concernée par la présente étude est composée de 16.185 secours réalisés entre Février 2007 et Février 2008. Ce travail a été approuvé par le Comité d'Éthique et de Recherche (CEP) de l'Hospital Onofre Lopes, numéro de registre 153/07. Les résultats obtenus montrent que la plupart des secours ont eu lieu pendant le jour, que le dimanche a concentré le plus grand nombre des secours, et que la majorité de ces derniers sont des secours cliniques, notamment de nature métabolique. Quant aux secours traumatologiques, ils sont surtout liés aux collisions provoquées par les accidents de la circulation.

MOTS-CLÉS: Secours D'urgence Pré-Hospitalier, Unités Mobiles D'urgence, Causes Extérieures.

CARACTERÍSTICAS DE LOS ATENDIMIENTOS CLÍNICOS Y TRAUMÁTICOS DEL SERVICIO DE ATENDIMIENTO MÓVIL DE URGENCIA DE NATAL DE RIO GRANDE DO NORTE RESUMEN

El Servicio de Atendimiento Móvil de Urgencia (SAMU) funciona 24 horas buscando mejorar la calidad de la Asistencia a las víctimas de traumatismo, y la atención especializada para las personas que son atendidas por emergencia clínica en general proporcionando atendimiento rápido y precoz en el lugar del acontecimiento. Delante de ese escenario que envuelve el APH móvil, ese trabajo tiene como objetivo identificar el turno de mayor atención realizado por el SAMU/Natal, caracterizar la gravedad clínica y traumatológica en relación al tipo de frecuencia y sexo. Se trata de un estudio del tipo descriptivo con alcance cuantitativo y datos retrospectivos colectados a partir del banco de datos del SAMU/NATAL,RN. La población del estudio estuvo constituido de 16.185 atendimientos realizados entre Febrero de 2007 a Febrero de 2008. El trabajo tuvo aprobación del protocolo registro del Comité de Etica e Investigación (CEP) del Hospital Universitário Onofre Lopes, protocolo N° 153/07. Los resultados evidencian que los atendimientos predominaron en el período diurno, el domingo fue el día de mayor registro de atendimientos, la mayoría de registros clínicos. En cuanto a los atendimientos clínicos se destacan los de naturaleza metabólica. En relación a los atendimientos traumáticos, se destacaron las colisiones provocadas por accidentes de tránsito.

PALABRAS CLAVES: Atendimiento de Emergencia Pré-Hospitalar, Unidades Móviles Emergencia, Causas Externas.

CARACTERÍSTICAS DOS ATENDIMENTOS CLÍNICOS E TRAUMÁTICOS DO SERVIÇO DE ATENDIMENTO MÓVEL DE URGÊNCIA DE NATAL/RN RESUMO

O Serviço de Atendimento Móvel de Urgência (SAMU) funciona 24 horas e visa melhorar a qualidade da assistência às vitimas de trauma e, o atendimento especializado a pessoas que são acometidas por emergências clínicas em geral, proporcionando atendimento rápido e precoce, ainda no local do evento. Diante desse cenário que envolve o APH móvel, esse trabalho tem como objetivo identificar o turno de maior atendimento feito pelo SAMU/Natal; caracterizar os agravos clínicos e traumatológicos, quanto ao tipo, frequência e sexo. Trata-se de um estudo do tipo descritivo, com abordagem quantitativa e dados retrospectivos coletados a partir do banco de dados do SAMU/NATAL,RN. A população do estudo constituiu-se de 16.185 atendimentos realizados entre fevereiro de 2007 a fevereiro de 2008. O trabalho teve aprovação do protocolo registro do Comitê de Ética e Pesquisa (CEP) — do Hospital Universitário Onofre Lopes, protocolo nº. 153/07. Os resultados evidenciam que os atendimentos predominaram no período diurno, o domingo foi o dia de maior registro de atendimentos, a maioria foi de registros clínicos. Quanto aos atendimentos clínicos, destacaram-se os de natureza metabólica. Em relação aos atendimentos traumáticos, destacaram-se as colisões provocadas por acidentes de trânsito.

PALAVRAS CHAVE: Atendimento de Emergência Pré-Hospitalar, Unidades Móveis de Emergência, Causas Externas.

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