Cogitare Enferm. 2016 Jan/mar; 21(1): 01-08

● **Original article**

PRE-HOSPITAL NURSING IN BASIC LIFE SUPPORT: ETHICAL AND LEGAL POSTULATES OF THE PROFESSION*

Antônio César Ribeiro[1], Yanna Baralle Silva[2]

ABSTRACT: The aim of this study was to discuss how nursing work is organized in pre-hospital care, considering the characterization of incidents assisted by a Basic Support Unit, observing the legislation that regulates this category's professional practice in Brazil. A descriptive, retrospective study conducted with the Emergency Mobile Care Service in Cuiabá, state of Mato Grosso. Data were gathered from the records of incidents from the first quarter of 2013. A total of 926 incidents were analyzed, and showed that injuries and nursing care are mostly of a complex nature, demanding technical and legal competencies for decision making, which takes us back to the necessary presence of a nurse. Thus, the model of organization of pre-hospital care, standardized by the Ministry of Health, is against the Brazilian nursing's legislation and workers who are technically responsible for nursing work or whose practice in nursing infringe upon the ethical and legal postulates of the profession.
DESCRIPTORS: Nursing; Nursing legislation; Emergency medical services.

ENFERMAGEM PRÉ-HOSPITALAR NO SUPORTE BÁSICO DE VIDA: POSTULADOS ÉTICO-LEGAIS DA PROFISSÃO

RESUMO: Objetivou discutir a forma de organização do trabalho de enfermagem na assistência pré-hospitalar, considerando a caracterização das ocorrências atendidas por uma Unidade de Suporte Básico, à luz da legislação que regulamenta e disciplina o exercício profissional da categoria no Brasil. Estudo descritivo, retrospectivo, realizado junto ao Serviço de Atendimento Móvel de Urgência em Cuiabá–MT. Os dados foram coletados a partir das fichas dos atendimentos realizados no primeiro trimestre de 2013. Foram analisadas 926 ocorrências, constando-se que tanto os agravos quanto as ações de enfermagem se configuram majoritariamente como situações complexas, demandando competências técnicas e legais para a tomada de decisão, o que remete à necessidade da presença do enfermeiro. Considerou-se assim que a forma de organização da atenção pré-hospitalar, normatizada pelo Ministério da Saúde, afronta a legislação da enfermagem brasileira e que os profissionais que respondem tecnicamente pelo trabalho de enfermagem ou nela atuam, infringem postulados ético-legais da profissão.
DESCRITORES: Enfermagem; Legislação de Enfermagem; Atendimento de Emergência Pré-Hospitalar.

ENFERMERÍA PREHOSPITALARIA EN SOPORTE BÁSICO DE VIDA: POSTULADOS ÉTICO-LEGALES DE LA PROFESIÓN

RESUMEN: Se objetivó discutir formas de organización del trabajo de enfermería en atención Prehospitalaria, considerando la caracterización de los eventos atendidos por una Unidad de Soporte Básico, de acuerdo a legislación que reglamenta y disciplina el ejercicio profesional de la categoría en Brasil. Estudio descriptivo, retrospectivo, realizado con el Servicio de Atención Móvil de Urgencias en Cuiabá-MT. Datos recolectados de fichas de atenciones realizadas en el primer trimestre de 2013. Fueron analizados 926 registros, constatándose que tanto los eventos como las acciones de enfermería configuran mayoritariamente acciones complejas, demandando competencias técnicas y legales para toma de decisiones, lo cual remite a la necesidad de presencia del enfermero. Se consideró así que la organización de la atención Prehospitalaria, normada por el Ministerio de Salud, se contrapone con la legislación de enfermería brasileña, y que los profesionales técnicamente responsables por el trabajo o actuantes en enfermería, infringen postulados ético-legales de la profesión.
DESCRIPTORES: Enfermería; Legislación de Enfermería; Servicios Médicos de Urgencia.

*Article extracted from the end of course paper entitled: "*Caracterização dos atendimentos de uma unidade BRAVO/SAMU e sua relação com a equipe de enfermagem*". Federal University of Mato Grosso. 2014.

[1]Nurse. Doctor of Sciences. Professor at the College of Nursing of the Federal University of Mato Grosso. Cuiabá, Mato Grosso, Brazil.
[2]Nursing undergraduate. Federal University of Mato Grosso. Cuiabá, Mato Grosso, Brazil.

Corresponding author:
Antônio César Ribeiro
Universidade Federal de Mato Grosso
Av. Tancredo Neves, 108 - 78065-230 - Cuiabá, MT, Brasil
E-mail: anceri1964@gmail.com

Received: 13/07/2015
Finalized: 06/01/2016

INTRODUCTION

The Emergency Mobile Care Service (*Serviço de Atendimento Móvel de Urgência* – SAMU) is part of the National Policies for Urgencies and Emergencies, with the aim of organizing pre-hospital care in the public health network[1].

Present in the whole country, SAMU had its guidelines redefined in 2012 and has the goal of responding early to victims of any type of injury that may cause suffering, leave sequelae or lead the victim to death. Thus, pre-hospital care is provided to society[1-2].

This service is structured by a Center of Urgency Regulation, which is staffed by workers who are trained to screen the cases that demand guidance and/or emergency care, organized by flow in a system of referral and counter-referral. Its technical activities are coordinated by regulator medics, based on information given by the users, who manage and define the operation of means available to respond to incidents using technical protocols and decision power to choose the necessary health equipment for adequate care for the victims[2].

As of the redefinition of its guidelines, SAMU is organized in Basic Life Support Units (*Unidades de Suporte Básico de Vida Terrestres* – BRAVO), Advanced Life Support Units (*Unidades de Suporte Avançado de Vida Terrestre* – ALFA), Aeromedical Teams, Watercraft Teams, Motorcycle Ambulances, and Quick Intervention Vehicles[2].

According to the Technical Standard of the Ministry of Health (NT-MS)[2], ALFA units must have teams made up of one medical worker, one nurse and one driver (ambulance driver trained for basic life support); BRAVO units may be composed of one nursing aide or technician and a driver. Motorcycle ambulances may be conducted by a medium or higher level nursing professional with specific training.

Nursing, as part of the teams that compose SAMU in all its organization models, has its actions regulated by specific legislation, which define the legal competencies of each worker. In this sense, assisting patients at risk of death is an exclusive task for nurses, in situations that demand immediate decision[3].

In Brazil, technical regulation, from specific legal rulings, and supervision of the performance of professions are delegated by the State to the corporations. In this sense, Law No. 5.905/1973 created the Federal Council of Nursing (*Conselho Federal de Enfermagem* – COFEN) and its Regional divisions which, as federal authorities, are responsible for the professional discipline of nurses and other professions involved in nursing services[4].

Thus, in order to reinforce regulating legislation for the professional practice of Brazilian nursing (LEPE), related to pre-hospital and inter-hospital care, COFEN disciplined the technical and legal competencies of its workers, establishing that nursing care, regardless of the risk status, will only be carried out in the presence of nurses. In this sense, it reaffirms that activities developed by nursing technicians and aides must be performed under the direct supervision of nurses[3,5].

Concerning the legal competencies of medium-level nursing workers, LEPE asserts that nursing technicians "[…] perform medium-level activities, involving guidance and monitoring of nursing work at an auxiliary degree and participation in the planning of nursing care[…]". Nursing aides "[…] perform medium-level activities of a repetitive nature, involving auxiliary nursing services under supervision, as well as participation in simple execution"[3].

Therefore, this study had the aim of discussing the organization model of nursing work in pre-hospital care, starting from the characterization of incidents assisted by a Basic Life Support Unit, part of the Center of Regulation of SAMU Cuiabá, in the state of Mato Grosso, observing the legal standards that regulate and discipline the profession in Brazil[3-7].

METHOD

This is a descriptive, retrospective study conducted with one BRAVO unit, part of the SAMU Center of Cuiabá, in the state of Mato Grosso.

In the metropolitan region of the municipality, SAMU is organized in three levels of care: ALFA, BRAVO and Motorcycle Ambulance[2]. Its regulation central watches over three advanced support units, seven basic support units and two motorcycle ambulances to assist the greater region of Cuiabá, which includes the cities of Várzea Grande, Poconé and Chapada dos Guimarães.

According to regulations from the Ministry of Health[2], in Cuiabá, BRAVO teams are composed of two nursing professionals and one driver.

Among the basic life support units, we chose BRAVO III, which has its base in an Emergency Care Unit (*Unidade de Pronto Atendimento* – UPA). This unit was chosen at random because of the similar characteristics it shares with other units in terms of the size of its territory covered and composition of teams, also considering ease of access for researchers. Its team has 12 nursing professionals, 2 nurses and 10 nursing technicians, who are distributed in shifts whose teams are composed of two of these professionals and a driver. According to the Center's Nursing Management, the presence of nurses in the shifts of BRAVO units is occasional and meets the personal demands of these workers' allotment, with no technical criteria for their allotment in the teams.

Data regarding the characterization of injuries were gathered from medical records standardized by the SAMU Center in Cuiabá. Therefore, we considered as inclusion criteria the records of services performed by BRAVO III Unit, with complete or partial information, in the period between January and March, 2013. Since there was the occasional presence of nurses in the teams, we established as exclusion criteria the records of care provided by them.

From the selected records, we used objective (age, gender, type of injury, details of external cause, clinical exam, vital signs, Glasgow, performed procedures, administration of medication, destination of victim and arrangement of the team) and subjective information (assessment, diagnosis, evolution/complications).

In the "vital signs" variable, we observed if the data was registered totally, partially or if it was entirely missing, not the values related to the clinical conditions of the victim. For this assessment, we opted for Glasgow Coma scale, whose minimum score is 3 and maximum score is 15, divided in three parameters: Eye response (1 to 4), verbal response (1 to 5) and motor response (1 to 6)[8]. In the variable "team arrangement" we considered the presence of one or two nursing workers plus the driver, or no records.

Once the data were gathered, they were systematized and typed, which created a databank with resources from the software EpiData 3.1. Data were analyzed according to their distribution and frequency.

Analysis and discussion of results were conducted according to the technical standards of the Ministry of Health(1-2), which standardize the organization of SAMU, and of the legal commandments that regulate the performance of Brazilian nursing[3-7].

All methodological procedures were considered from the ethical point of view and, in this sense, the original project was submitted and approved by the Human Research Ethics Committee of the University Hospital Julio Müller/UFMT, under ruling no. 427.039, from 17/10/2013.

RESULTS

Between January and March of 2013, 1007 incidents were effectively assisted by the BRAVO III unit of SAMU/Cuiabá. Of these, 81 events were disregarded because their teams had the occasional presence of a nurse. Nine-hundred and twenty-six (91.95%) were considered completed assistances.

Of the assisted cases, 495 (53.5%) were male victims. As for the type of injuries, external causes stood out, with 435 (47%); followed by clinical injuries in adults, with 240 (25.8%). The remaining cases amounted to 93 (10.1%), distributed among psychiatric, gynecologic/obstetrics, pediatric and non-

specified cases. The expressive number of cases with no records regarding their type stood out, with 158 (17.1%).

Of records regarding specifically external causes, collisions between cars and motorcycles, with 210 (48.3%); motorcycle falls, with 74 (17%); and different level falls, with 57 (13.1%) stood out; followed by other events with lower numbers.

From the 240 cases with clinical nature in general, eight (3.2%) were recorded, with emphasis on arterial hypertension, with two (0.8%) and arterial hypertension associated with cerebrovascular accident, with two (0.8%).

From the "clinical exam" variable, we found that 908 (98.1%) occurrences had no records of the victims' conditions. Specifically on vital signs, whose analysis was limited to the presence or absence of records, we observed that only 60 (6.5%) occurrences were fully recorded, including data related to heartbeat, arterial pressure, breathing, and temperature. Among the remaining, 482 (52.1%) had partial records and 384 (41.4%) had none.

Regarding the variable "Glasgow coma scale"[8], whose analysis sought to identify records of the clinical conditions of victims, the number of sheets with no records stood out, with 897 (97%) of the total.

In the records we found, there was a higher relevance of scores 15, with 17 (1.8%); 14, with 6 (0.3%); and 3, with 3 (0.3%), followed by scores 11, 9, 6, all with 1 (0.1%) incident.

Procedures were researched by record sheet and considered according to the care offered to the victims. Thus, from the total number of incidents, 770 (83.4%) had no records of the procedures performed. Among those with records, the most frequent were: Rigid splint + cervical collar, with 92 (9.9%); followed by bandages, with 18 (1.9%); cervical collar only, with 12 (1.3%); Rigid splint + cervical collar + splint + traction, with seven (0.8%); among others less frequent. In 25 (2.7%) cases, administration of medication was recorded as part of the procedures.

Among incidents with presence of the team, we could observe the following conclusions, pre or post-care: evasion of the victim, refusal of assistance, victims assisted and discharged, victims transported by SAMU, victims transported by third parties, death of victims in location and no records of conclusion. From the total number of incidents, 653 (70.5%) were taken by SAMU to a reference unit. Among the remaining, 121 (13.1%) had no records of conclusion and/or destination of victims and, less frequently, 73 (7.9%) were recorded as in site care with discharge; 58 (6.3%) as refusal of assistance; 11 (1.2%) as transportation by third parties; eight (8%) as death in location and two (0.2%) evaded the location before arrival of the team.

When analyzing subjective information in the sheets, we noticed that the data recorded, both in assessment and in evolution/complications, had the same information in the description of the accident and/or status of the victim, with frequent repetition in both fields. As for diagnoses, no records were found in the sheets.

● DISCUSSION

From the beginning, we could observe that, according to findings of other studies that sought to characterize events that required SAMU, the main ones are those assisted by basic life support units (*Unidades de Suporte Básico de Vida Terrestre* – USB), which puts this level of care at the center of the organization of this service[9-11].

In this study, which was limited to assistances of one of the BRAVO units, we observed in the distribution of cases, both by type of injury and by the victim's gender, results similar to those of other studies, locally and nationally, that sought the same characterization[11-13], with 47% and 25.9% of cases related to external causes and clinical cases, respectively, and 53.5% of assistances to male victims. Studies in the South and Southeastern regions are exceptions, with cases of clinical nature standing out[10,14].

In the analysis of distribution of events by external causes, traffic accidents stand out, related to collisions between cars and motorcycles, with 52.1%; followed by motorcycle falls, with 17.4%; and different level falls, with 14.9%. Other studies confirm the epidemiological importance of these injuries[11-13,15]. These are situations in which the scenario is unknown by and unpredictable for the team, and whose victims require attentive primary assessment, with qualified decisions for the first assistances and referrals in a reference system for trauma care. Victims need to be stabilized and immobilized adequately, with the aim of maintaining their vital conditions, decreasing/avoiding the worsening of clinical status and/or sequelae, which require ability and technical competence[15].

Data related to the variable clinical exam stood out. Its results depend on perception and technical capacity for assessment of the victim. In this case, it was found that 98.1% of incidents had no records of the victims' conditions. Vital signs, which are part of clinical assessment and whose verification practice is a routine in any nursing service at the hospital level for patients in situation of hospitalization or in clinic, only 6.5% of incidents were fully recorded by the team; in 52.1% of events, there was only partial records; and in 41.5% of sheets there were no records.

On victim assessment, we have the Glasgow Coma Scale as a potent technical resource for assessment in pre-hospital care in situations of trauma. It is used worldwide to assess the level of consciousness, it is practical and enables comprehension in the process of technical communication for decision making and qualified performance by the Center of Regulation[8]. In 96.9% of incidents there were no records available for this parameter.

According to the National Association of Emergency Medical Technicians, when assisting trauma victims, one should consider three stages of assessment: what caused the collision (use of legal or illegal substances, preexisting conditions); analysis of the collision's impact, which can be divided into three types (two object collision; collision of the victim against the vehicle; impact of the organs inside the victim) and integration of the previous elements by the health professional, who assess possible complications that could result from the accident in order to decide the course of action[8].

Data related to the type of injuries assisted by nursing teams, as shown, demonstrate that the type of required intervention is far from being considered repetitive and/or of an auxiliary nature, according to the law of professional performance that regulates the attributions of medium-level agents in nursing[3].

The goal of SAMU is to maintain life by offering basic or advanced support and safe transportation to a health service that has adequate technology for each particular situation, which demands accurate assessment and decision making for the assistance and consequent referral[1-2].

Nursing care in situations of pre-hospital urgency/emergency requires attentive assessment for immediate decision, in the sense of choosing the best course of action with the goal of meeting the needs of the victim, both to cure or to anticipate them. This practice demands the presence of a nursing professional, since this is the only carrier of such legal competence[3,5].

The performed procedures, which could qualitatively characterize nursing care in pre-hospital assistance, showed that in 83.2% of cases, there was no reference to the care offered. In the limited records, with the prevalence of injuries resulting from external causes, actions related to immobilization and transportation stood out, being offered in 92 (9.9%) of cases, followed by bandages, with 18 (1.9%).

Due to the type of incidents, we expected that the performed procedures variable would present a meaningful amount of records that could characterize nursing practice. However, we found an almost complete absence of records, which may be related to two reasons in particular: (1) difficulties in filling the sheet, motivated by the dynamics of practice; or (2) non-performance of standard procedures for this type of care[10].

Another situation that is part of nursing care and that goes against nursing regulations, although not frequent, was the administration of medication without direct supervision of nurses and with verbal prescription from the regulating medic. This happened in 25 (2.7%) events[6].

In this last situation, according to the COFEN, two considerations remain: (1) the nurse that performs the administration of medication in an urgent and emergent situation must, as an obligation, write a meticulous and detailed report about the circumstances that led to it. However, the records we

analyzed did not have sufficient information to determine the severity of injuries and the situation that caused them; (2) situations of imminent risk of death demand complex intervention actions, which, unequivocally, require de presence of a nurse[3,5-6].

All workers who practice in rescue teams go through specific training, as defined in the technical standards of the Ministry of Health[2]. However, despite the training offered to nursing agents as a criterion for their inclusion in rescue teams, one must consider that the construction of technical competence through isolated training programs cannot step over the legal competence defined by law. The fact that medium-level nursing workers go through continuous training does not confer them legal prerogatives different from those stated in the profession's regulation[3,5-7].

When the Brazilian Ministry of Health defines that a BRAVO unit can be composed of a technician or aide nurse and a driver[2], it is implicit that these workers take full responsibility for the care process, including the emission of assessments of the victims' clinical condition that will guide the regulator medic when deciding the course of action.

Nurses are indispensable in pre-hospital care as qualifiers of nursing assistance offered in various situations, which emphasizes the need for them to lead basic support teams[5,16-18].

Regarding the destination of assisted cases, in 73 (7.9%) incidents, the nursing technician, under advice of the regulator medic, discharged the victim instead of referring them after the assistance without transferring them to the reference health unit. In these cases, the order of discharge is decided by the Center of Regulation using information produced by the clinical assessment conducted by the medium-level nursing worker. It is never enough to stress that the medium-level nursing agent, in addition to lacking legal competence[3,5], does not possess the technical competence to clinically assess the victim and to induce the decision making of the medic for discharge or referral.

With evidence related to the composition of the teams and the assistances offered by them, we evoke the ethical practice codified by the category. The Code of Deontology of nursing professionals establishes that workers should only accept tasks for which they are technically and legally competent, which puts nursing technicians in an ethically questionable condition[7].

On the other hand, we should consider that the allotment of nursing technicians to respond alone for the assistance offered by BRAVO teams is a responsibility of the nurse that is technically responsible for the organization and functioning of nursing care in SAMU. In this sense, even if following instructions from the Ministry of Health(2), they infringe upon another ethical device that prohibits the transference of functions to medium-level workers when they are inherent to nurses[7].

The code of ethics of nursing also states that its workers have the obligation to report to the Regional Council when they have to practice in situations outside of the legal standards of the profession, also defining as prohibited participation or tolerance in situations that go against the ethical and legal standards of professional practice[7].

With these evidences, in relation to the organization of nursing care in SAMU[1-2], it should also be considered that the Ministry of Health disregarded the professional legislation of Brazilian nursing[3,5-7] when creating the technical standards of this service, which, in addition to the affront, damages its institutional quality.

● FINAL CONSIDERATIONS

This study enabled to find that the type of injuries assisted by BRAVO/SAMU units are far from being considered simple.

In this sense, the whole professional regulation of Brazilian nursing is unequivocal when it states that medium-level nursing agents can only practice under direct supervision of nurses. Thus, the model of organization of Basic Support Units for pre-hospital care, as defined by the Ministry of Health, goes against the legal content that regulates the professional practice of Brazilian Nursing.

The fact that nursing aides or technicians are formally allotted, backed by a technical norm of the

Ministry of Health, for performing functions that are inherent to nurses suggests the violation of the latter's labor market, which casts doubt about the professionalism of Brazilian nursing in the sphere of professional sociology.

Even if this study has limitations, if we consider the dimension of the theme, its results inspire reflection in Brazilian nursing regarding its practice and the violation of its professional territory, in the perspective of its professional condition in this context.

Further studies should be conducted with the aim of broadening the theme, which includes other sectors/practice scenarios of nurses in the health field.

REFERENCES

1. Portaria nº 1.600 Ministério da Saúde, de 7 de julho de 2011 (BR) [internet]. Reformula a política nacional de atenção às urgências e institui a rede de atenção às urgências no Sistema Único de Saúde (SUS). [acesso em: 22 abr 2015]. Disponível em: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2011/prt1600_07_07_2011.html.

2. Portaria Nº 1.010 Ministério da Saúde, de 21 de maio de 2012 (BR). Redefine as diretrizes para a implantação do Serviço de Atendimento Móvel de Urgência (SAMU 192) e sua Central de Regulação das Urgências, componente da Rede de Atenção às Urgências. [acesso em: 18 mai 2014] Disponível em: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2012/prt1010_21_05_2012.html.

3. Brasil. Lei Nº 7.498, de 25 de junho de 1986. Dispõe sobre a regulamentação do exercício da enfermagem, e dá outras providências. Diário Oficial da União. 26 Jun. 1986 [acesso em: 25 fev 2014]. Disponível em: http://novo.portalcofen.gov.br/lei-n-749886-de-25-de-junho-de-1986_4161.html.

4. Brasil. Lei 5.905, de 12 de julho de 1973. Dispõe sobre a criação dos Conselhos Federal e Regionais de Enfermagem e dá outras providências. Diário Oficial da União. 13 Jul. 1973 [acesso em: 25 fev 2014]. Disponível em: http://novo.portalcofen.gov.br/lei-n-590573-de-12-de-julho-de-1973_4162.html.

5. Resolução Nº 375 do Conselho Federal de Enfermagem, de 23 de março de 2011 (BR). Dispõe sobre a presença do enfermeiro no atendimento pré-hospitalar e inter-hospitalar, em situação de risco conhecido ou desconhecido. [acesso em: 25 fev 2014]. Disponível em: http://novo.portalcofen.gov.br/resoluo-cofen-n-3752011_6500.html.
6. Resolução Nº 487 do Conselho Federal de Enfermagem, de 25 de Agosto de 2015 (BR). Veda aos profissionais de enfermagem o cumprimento da prescrição médica à distância e a execução da prescrição médica fora da validade. [acesso em: 17 dez 2015]. Disponível em: http://www.cofen.gov.br/resolucao-cofen-no-4872015_33939.html.

7. Resolução Nº 311 do Conselho Federal de Enfermagem, de 08 de fevereiro de 2007 (BR). Aprova a reformulação do Código de Ética dos Profissionais de Enfermagem. [acesso em: 25 fev 2014]. Disponível em: http://novo.portalcofen.gov.br/resoluo-cofen-3112007_4345.html.

8. NAEMT. Atendimento pré-hospitalar ao traumatizado / NAEMT (National Association of Emergency Medical Technicians), [tradução de Diego Alfaro e Hermínio de Mattos Filho]. – Rio de Janeiro: Elsevier, 2007. p. 98.

9. Gonsaga RAT, Brugugnolli ID, Zanutto TA, Gilioli JP, Silva LFC, Fraga GP. Características dos atendimentos realizados pelo Serviço de Atendimento Móvel de Urgência no município de Catanduva, Estado de São Paulo, Brasil, 2006 a 2012. Epidemiol. Serv. Saúde [internet]. 2013 [Acesso em: 22 abr 2015]; 22(2): 317-324. Disponível em: http://scielo.iec.pa.gov.br/pdf/ess/v22n2/v22n2a13.pdf.

10. Marques GQ, Lima MADS, Ciconet RM. Agravos clínicos atendidos pelo Serviço de Atendimento Móvel de Urgência (SAMU) de Porto Alegre - RS. Acta paul. enferm. [Internet]. 2011 [Acesso em: 22 abr 2015] ; 24(2): 185-191. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-21002011000200005&lng=en.

11. Soares RAS, Pereira APJT, Moraes RM, Vianna RPT. Caracterização das vítimas de acidentes de trânsito atendidas pelo Serviço de Atendimento Móvel de Urgência (SAMU) no Município de João Pessoa, Estado da Paraíba, Brasil, em 2010. Epidemiol. Serv. Saúde [Internet]. 2012 Dez [Acesso em: 22 abr 2015]; 21(4): 589-600. Disponível em: http://scielo.iec.pa.gov.br/scielo.php?script=sci_arttext&pid=S1679-49742012000400008&lng=pt.

12. Duarte SJH, Lucena BB, Morita LHM. Atendimentos prestados pelo serviço móvel de urgência em Cuiabá, MT,

Brasil. Rev. Eletr. Enf. [Internet]. 2011 [acesso em: 28 fev 2014]; 13(3):502-7. Disponível em: http://www.fen.ufg.br/revista/v13/n3/pdf/v13n3a16.pdf.

13. Pitteri JSM, Monteiro OS. Caracterização do Serviço de Atendimento Móvel de Urgência (SAMU) em Palmas-Tocantins, Brasil, em 2009. Com. Ciências Saúde. [internet]. 2010 [Acesso em: 22 abr 2015]; 21(3): 227-236. Disponível em: http://bvsms.saude.gov.br/bvs/artigos/caracterizacao_servico_atendimento_movel.pdf

14. Julien MST, Araujo OCL. Caracterização dos atendimentos prestados pelo SAMU - Serviço de Atendimento Móvel de Urgência de um município do Vale do Paraíba – SP. Rev. Eletr. Enf. Vale do Paraíba. [internet]. 2013 [Acesso em: 22 abr 2015]; 1(5): 33-50. Disponível em: http://publicacoes.fatea.br/index.php/reenvap/article/viewArticle/1133.

15. Pereira WAP, Lima MADS. O trabalho em equipe de no atendimento pré-hospitalar à vítima de acidente de trânsito. Rev Esc Enferm USP [internet] 2009 [acesso em: 21 fev 2014]; 43(2):320-7. Disponível em: http://www.scielo.br/pdf/reeusp/v43n2/a10v43n2.pdf.

16. Bernardes A, Ramos BM, Betela Júnior J, Paiva PN. Supervisão do enfermeiro no atendimento pré-hospitalar móvel: visão dos auxiliares de enfermagem. Cienc. Cuid. Saúde [internet]. 2009 [acesso em: 25 fev 2014]; 8(1):79-85. Disponível em: http://periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/7778/4412.

17. Bueno AA, Bernardes A. Percepção da equipe de enfermagem de um serviço de atendimento pré-hospitalar móvel sobre o gerenciamento de enfermagem. Texto Contexto Enferm. [Internet]. 2010 [acesso em: 25 fev 2014]; 19(1):45-53. Disponível em: http://www.scielo.br/pdf/tce/v19n1/v19n1a05.pdf.

18. Pereira WAP, Lima MADS. O trabalho em equipe de no atendimento pré-hospitalar à vítima de acidente de trânsito. Rev Esc Enferm USP [internet] 2009 [acesso em: 21 fev 2014]; 43(2):320-7. Disponível em: http://www.scielo.br/pdf/reeusp/v43n2/a10v43n2.pdf.