

Assistance of Nurse in Emergency Trauma Victims: Integrative Review

REVIEW

Anahi César de Lima Lins¹, Anne Milane Formiga Bezerra²,
Elicarlos Marques Nunes³,
Renata Suele Maia Pereira⁴, Gláucia de Sousa Abreu Alencar¹,
Nívia Maria da Silva¹, Maria do Socorro Sarmiento Pereira⁵,
Heloísa Helena Alves de Andrade⁶,
Mirelly Aristoteles Pereira⁷, Milena Nunes Alves de Sousa⁸

- 1 Nurse. Specialist in Urgency and Emergency
- 2 Nurse. Master in agro-industrial Systems. Teacher*
- 3 Nurse. Master in public health. Teacher*
- 4 Nurse. Specialist The nurse Job.
- 5 Nurse. Graduated from UFCG.
- 6 Nurse. Specialist in Urgency and Emergency/Intensive care unit
- 7 Nurse. Specialist in Home Care.
- 8 Nurse. Doctor in Health Promotion. Teacher*.

*: At the Integrated Faculties of Patos, Paraíba, Brazil.

Abstract

Introduction: The nurse is considered active participant along with the team taking responsibility for assistance in caring for victims in emergency situations. One of its tasks is to define protocols for specific calls for each emergency situation anticipating the needs of victims. The trauma care is part of the daily routine of the emergency services of hospitals throughout Brazil.

Objective: To analyze the role of the nurse in the emergency room and the importance of care in trauma victims.

Methodology: This is a research of literature review, through which it was carried out a scientific production survey related to nursing actions in care for victims of trauma, in the database SCIELO, LILACS and MEDLINE referring to the period of 2004 to 2014, using the descriptors: nursing care; nursing assistance; trauma.

Results: The productions studied possible to identify considerations and presentations of results about the vocational training, the nurse assignments and the difficulties faced, needing to have agility, knowledge and special care.

Conclusion: The participation of the nurse is referred to as being of great relevance to the developed treatment and academic training, and is composed of key competences and skills to act in the face of situations of emergency.

Contact information:

Elicarlos Marques Nunes.

Address: Horácio Nóbrega, S/n, Belo Horizonte, Patos, Paraíba, Brazil. CEP: 58.704-000

✉ elicarlosnunes@yahoo.com.br

Keywords

Nursing Care; Nursing Assistance; Trauma.

Introduction

The nursing continues to seek organization of the values of their profession. And to their identity in assistance can actually be built and demystified submission to other classes, it is necessary to abandon the use of interventions without planning, reflection and scientific justification [1].

In emergency care services, especially in big centers, it is common to receive high demand from patients in various situations of urgency where it takes the team to work effectively and quickly in order to minimize life-threatening situations [2].

The nurse is considered active participant along with the team taking responsibility for assistance in caring for victims in emergency situations. One of its tasks is to define protocols for specific calls for each emergency, anticipating the needs of victims, establishing intervention priorities, promoting stabilization and re-evaluation of the general condition in order to optimize the procedures achievement [3].

It is seen as an essential factor the specific training for professionals working in the emergency department, both technical and scientific as a continuing education focused on self care, requiring mastery of their own emotions, their limits and possibilities [2].

Brazil has an epidemiological profile in which external causes, especially traffic accidents, which are the second cause of death in the country, showed a higher mortality rate in recent decades [4].

The traffic accidents cause traumatic injuries that constitute the leading cause of death among victims from 10 to 29 years old. In this scenario the nurse needs to be able to perform the physical examination of the patient expeditiously, dispense immediate treatment, with skill and initiative to coordinate the team [5].

The trauma care is part of the daily routine of the emergency services of hospitals throughout Brazil. Trauma is defined as a change or imbalance in the organism, leading to an exchange of energy between the tissues and the means [6]. Among the

main, we highlight the Traumatic brain injury (TBI), the Spinal Cord Injury (SCI) and thoracoabdominal trauma.

It is understood as TBI any aggression that causes injury or functional impairment of the scalp, skull, meninges and brain [7]. This injury has great impact on health, is a major cause of death in people aged from 5 to 35 years representing a percentage of 15% to 20% and accounts for 1% of all deaths in adults [8]. The main causes are due to assaults, traffic accidents and falls.

This rating varies according to intensity in mild, moderate and severe. Traumas classified as light corresponds to about 80% and usually the victims evolve uneventfully. The affected by moderate injuries account for 10% and are presented with a lowered level of consciousness, sleepy, disoriented, confused. They require intensive care unit (ICU) and reevaluation in the first 12 hours and 24 hours after trauma, because usually have rapid changes affecting the brain oxygenation. Patients enrolled in severe trauma present a risk of high mortality, where the initial approach should be immediate, emphasizing hemodynamic care and ventilatory support, not forgetting the secondary injury to the trauma that must be detected quickly [8].

The SCI is described as a spinal injury that leads to impairment of the spinal cord. Depending on the injury, it can vary in only a concussion where there is a total recovery of the victim, to a contusion, laceration and spinal cord compression, or in a complete transection which makes the patient paralyzed below the level of injury [9]. As in the TBI, its main causes are due to falls, car, work or sports accidents, the result of firearm.

In SCI are inserted various complications. One of the main is the spinal shock, which represents a loss of reflex activity of the spinal cord, the muscles become paralyzed and flaccid it is absented the reflections. The individual with spinal cord injury often is incapacitated to such functions, causing other problems such as deep vein thrombosis due to im-

mobility, respiratory failure by impairment of lung function depending on the level of injury, pressure ulcers, infections, bowel dysfunction, psychosocial changes, among others [10].

Thoracoabdominal trauma can be defined as a weapon from fire gun or white gun, as well as in other trauma mainly by impacts resulting from automobile accidents, falls, assaults. This type of trauma is responsible for a considerable number of deaths that could be prevented, and that the intraperitoneal cavity along with the chest cavity and fractures of long bones contain a lot of blood due to some lacerations caused in trauma thereby increasing the index of mortality due to hemorrhagic shock [11].

It can be classified as blunt or penetrating. In blunt trauma, it occurs acceleration, deceleration, compression and shear of the organs in different directions and are susceptible to lacerations or crushing [11]. It is mainly secondary to traffic accidents with a prevalence of 68% to 76% of cases [12]. In penetrating trauma, precisely by firearm, may have different directions, if there are for other penetrating agents, the injury is directly due to the path and structure that will be crossed [11].

The overall objective of the study is to analyze the importance of care provided by the emergency nurse to trauma victims. In order to sharpen the reflection on the issue at hand, giving openness to further discussions with the aim of promoting the development of new concepts across the nurse's role in assisting these victims in urgent and emergency units.

It is justified the choice of the theme proposed, the need to understand the importance of the participation of nurses in the care of trauma patients and to identify the main difficulties of nurses in such situations of emergency, since it is proven the high index of service in patients with trauma, in the emergency department, mainly due to traffic accidents.

Method

This is a research of literature review, through which it was carried out a scientific production survey related to nursing actions in care for victims of trauma, in the database SCIELO, LILACS and MEDLINE for the period from 2004 to 2014. Therefore the descriptors were used: nursing care, nursing assistance, trauma. In the search, they were identified 43 articles related to the topic in question.

The selected studies were categorized according to the thematic focus, year of publication, research setting and covered methodology. There were excluded from the research 19 articles, that did not meet the inclusion criteria, six articles did not fit the theme and/or were published before the year of 2004, resulting in 18 articles for the study.

Results And Discussion

The studied production report to the role of the nurse in the emergency room and the importance of care trauma victims. The **Table 1**, prepared

Table 1. Description of the studied articles in relation to the variables.

Title	Year	Journal	Research Type	Authors
Nursing care in pediatric emergency service	2004	Latin American nursing journal	exploratory descriptive qualitative	Tacsi Vendrusculo
pathophysiological and welfare aspects of nursing in the rehabilitation of the person with spinal cord injury	2004	USP Nursing School journal	descriptive qualitative	Bruni et al
The effects of behavioral changes of craniocerebral trauma victims for the family caregiver	2005	Latin American nursing journal	exploratory descriptive qualitative	Hora; Sousa

Title	Year	Journal	Research Type	Authors
Comparative analysis of the mechanisms of trauma, injuries and the severity profile of victims in Catanduva-SP	2006	Rev. Col. Bras Cir.	Comparative analysis	Batista et al
Treatment of patients with neurotrauma	2006	Medical Surgical Nursing Treaty	Literature review	Smeltzer Bare
General approach of abdominal trauma	2007	Rev. Fac. Med of Ribeirão Preto	Literature review	Pereira Junior; Lovato Carvalho Horta
The importance of workup in left thoraco-abdominal wounds by weapon	2010	Rev. Med Minas Gerais	Literature review	Andrade et al
Conceptions and feelings of nurses working in prehospital care on practice and training	2010	Latin American nursing journal	Descriptive Qualitative	Romanzini Bock
Nurses' performance in the pre-hospital care in TBI victims	2011	electronic magazine of nursing center of nursing and nutrition studies	Exploratory Qualitative Integrative analysis	Pacheco et al
Pipelines in patients with traumatic brain injury	2011	Rev. Bras. Clín. Med.	Literature review	Gentile et al
Institutional and care demands in managing of nurses in the emergency room	2011	Rev. Bras. Enferm	Qualitative	Motezelli; Peres; Bernardino
Nurses care for traumatic brain injury victim: a literature review	2011	Rev. Interdisciplinary Novafapi	Literature review	Pereira et al
The nurse in the quality managing in emergency hospital service: literature	2011	Gaúcho Nursing Journal	Literature review	Bellucci Junior MATSUDA
The academic nursing formation and incidents with multiple victims: integrative review	2012	USP Nursing school journal	Literature review	Salvador et al
Nursing practices in a clinic in the perspective of comprehensiveness	2012	Latin American nursing journal Qualitative	Descriptive Qualitative	Pinto et al
Nursing diagnoses in trauma victims in the first six hours after the event	2012	Acta Paul Nursing	cross-cut quantitative	Sallum Sousa
Systematization of nursing care	2012	Brazilian	Field study Nursing journal	Maria Quadros

following, describes systematically the submitting of the articles used in relation to: title, publication year, journal, type of research and authors.

There has been a highlight in the variables year and journal, where they were found more frequent articles of 2011 and periodic of Latin American Journal of Nursing, Journal of the USP School of Nursing (REEUSP) and the Brazilian Journal of Nursing (REBEN) nationally. Regarding the type of research, there was featured in literature, descriptive and qualitative review publications.

The care in the face of emergencies situations, especially from trauma, should focus on a different precept from those practiced routinely: the focus should be the maximum assistance, cautious and more agile as possible. In other words, the duty of these professionals is to offer the best care to the greatest number of victims, which involves the right moment, time and resources, this is, an efficient professional performance. In this view, it is clear the need to prepare health professionals to act in a resolute way, involving peculiarities that must be

intimately known by the actors who will act in these situations in order to solidify efficient care, preventing the production of new traumas and injuries as well as worsening of existing [16].

Table 2. Distribution of studies according to the database used.

Databases and Eletronic Libraries	n
SCIELO	9
LILACS	1
CEEN Journals	1
UFRGS Journals	1
UFG Journals	1
USP Journals	2
NOVAFAPI Journals	1
DATASUS	1
Book	1
Total	18

It the **Table 2**, it displays the distribution of the articles studied according to the database where they are inserted, it appears that most of the articles comes from Scielo database, including articles linked to traditional Brazilian magazines of nursing schools like the University of São Paulo (USP).

In **Table 3**, it presents the relationship between vocational formation and training for emergency service second author and year.

The respect, the sensitivity and the ethics are virtues to associate them with the technical and scientific knowledge, they develop a fundamental condition for the critical and reflective performance of professional, committed to the quality of nursing service [5]. Thus, the service time and quality of assistance provided can define the prognosis of victims.

In **Table 4**, it relates the nursing team assignments on the care of trauma victims.

Table 3. Training and qualification for the emergency service second author and year.

Author/Year	Results
Romanzini; Bock (2010)	It is essential a greater demand on the part of training schools related to the proper behavior of the students in front of patients, as well as the need for internships in emergency services for the optimal development of its function.
Pereira et al (2011)	The nursing professional is trained to human care, and is responsible for promoting the maintenance of the integrity of the being and quality of life.
Sallum; Sousa (2012)	The emergency room is the site of initial hospital care for most victims of external causes that progress to be considered urgent and emergency situations.
Pinto et al (2012)	Every team should have the attention focused on the completeness with the ability to identify the cause of individual suffering, giving effective response immediately, recognizing each and every need of an intervention for health promotion and prevention worsening of diseases.

Table 4. The nursing team assignments in front of emergencies.

Author/Year	Results
Sallum; Sousa (2012)	The coordinator of nursing team has the primary responsibility to classify, prioritize and schedule the assistance to be provided for the needs of each particular victim, establishing preventive and remedial measures, always preserving the time in the emergency setting.
Maria; Quadros; Grassi (2012)	It is important that the nursing team has sensitivity and a clinical look at human needs, relating them always with the reality of performance.
Tacsi; Vendruscolo (2004)	The nurse is responsible for developing a number of actions in emergency services, including the management of human, technical and nursing assistants, as well as ensuring the availability of material resources and quality infrastructure allowing the team's performance in emergency care

Author/Year	Results
Bellucci Jr; Matsuda (2011)	The management of the nursing actions is considered essential for the organization of the team work process. It encompasses initiatives aimed at quality through structured, planned and continuously focused actions on meeting the user warm and resolute manner.
Montezelli; Peres; Bernardino (2011)	In emergency scenario there is no room for inaccuracies in management. The nurse in this area should have the ability to combine the time to the leading domain discernment, the initiative with emotional balance, agility, safety and theoretical foundation.

Table 5. Difficulties faced by nurses.

Author/Year	Results
Bellucci Júnior; Matsuda (2011)	On other industries, the emergency service of a hospital, it's probably one of the most complex to be the promotion of quality in assistance, as it is in this environment where problems such as the lack of hierarchy in attendance, lack of planning and assistance protocols and internal flows disorder caused by high demand in this sector, according to the Ministry of health. The Coordinator of the nursing staff's main assignment classify, prioritize and schedule the assistance to be provided taking into account the needs and particularities of each victim, establishing preventive and repairing, preserving always time on the emergency scenario
Montezelli; Peres; Bernardino (2011)	During the professional performance in an emergency hospital service is increasingly common to encounter difficulties in direct managerial activity for nursing care. Day by day you can see the inconsistency between the watch facing management actions that seek to basically bureaucratic acts.

It is necessary that the nurse to be encouraged to develop critical thinking from the beginning of their training in order to become able to plan and implement models and theories adapting them to the working conditions of the team.

In the **Table 5**, there are the main difficulties faced by nurses in emergency services.

There are several causes of mortality triggered by trauma, among them, there are the early deaths that occur within the first six hours after trauma, they have as main feature the potential treatment of these injuries dispensed to the victims in this period [18-20]. The type of assistance in the first hours after the trauma is a determining factor in the prognosis of these victims.

This is a reality that has been pursued in all aspects of nursing practice in order to be implemented with skill, theoretical and practical knowledge and especially in a humane way. However, the institutions do not have the conditions and resources to dispense quality care, which makes the work of the most difficult to run teams.

Conclusions

The contribution of nurses in treating trauma patients is critical to their recovery. Since their participation today is referred to as being of great relevance for the treatment developed in emergency services. Faced with the gravity of situations, where there is imminent risk of disability and death, the care process should be performed quickly and accurately, but not always it is realized, just for the various difficulties of lack of resources for adequate care, poor management, lack of hierarchy and clutter faced by professionals of emergency sectors.

In this perspective, we argue that academic training is composed of knowledge, competencies and skills essential to nurse and to act in the face of emergencies should initially be improved in the academic environment in order to achieve an integral formation that allows the improvement of health care professionals to consolidate a healthcare excellence.

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