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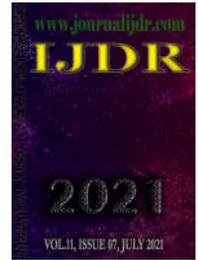
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RESEARCH ARTICLE

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## NURSING CARE TO POLYTRAUMATIZED PATIENTS IN URGENCY AND EMERGENCY SERVICES

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### ABSTRACT

**Introduction:** Currently the number of polytraumatized patients has been increasing along the years and for the effective and quality assistance, the professionals must be qualified to provide effective assistance. **Objective:** Analyze the nursing assistance actions to polytrauma patients in urgency and emergency services. **Methodology:** The present study is an integrative literature review. It was conducted in the months of September to December 2020 in the online database LILACS and the BVS Library and SciELO. **Result:** The actions performed by nurses in the care of polytrauma patients are essential for patient prognosis, and the primary and secondary assessments supported by the ABCDE of trauma are the procedures most performed by nursing. **Conclusion:** The study was extremely relevant for allowing the analysis of nursing care to polytraumatized patients seen in urgency and emergency services. It was verified that the care related to the ABCDE of trauma and primary and secondary assessments were paramount to nursing care in the intra-hospital environment.

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## INTRODUCTION

Traffic accidents are the most frequent traumatic emergencies, followed by falls, firearm wounds, physical aggression by bodily force and stab wounds. They may be related to several factors such as driver recklessness associated with external factors and lack of vehicle maintenance, which are the problems that lead to an increase in accidents and consequently poly-trauma to victims (DANTAS et al., 2017). According to Mattos and Silvério (2012), trauma is an event of devastating proportions for modern society, and can be

considered a lethal and silent epidemic, therefore a Public Health problem. The variety and degree of lethality of injuries caused by trauma result in physical and cognitive sequelae to the injured individual, which usually require care and interventions from the moment the individual suffers the trauma until the rehabilitation process (COSTA et al., 2012). Polytrauma can be understood as multiple traumas of various kinds, as a result of concomitant injuries, intentionally or accidentally, which may compromise many organs and systems of the body, in which there is a need for hospitalization for the patient's recovery, because it is considered a serious victim with imminent risk of death (BEZERRA et al., 2015). In Brazil, cases related to external causes that result in some type of traumatic injury

are predominant in males in the age group of 20 to 39 years old (BORGES; BRASILEIRO, 2018). In addition, polytrauma is responsible for the death of people in the age group of 20 to 40 years old (SAMPAIO *et al.*, 2019; TOLOTTI; SILVA, 2004). Thus, constituting a public health issue and consequently a priority in the area of Health (BORGES; BRAZIL, 2018). For Mattos and Silvério (2012), it is necessary to have a more effective approach and attention to polytrauma victims in order to reduce the percentages of morbidity and mortality and the social impact, consequently. Patients with multiple traumas require special and continuous assistance, from the first contact with the health team in the pre-hospital care, admission to the emergency room until hospital discharge. In the assistance to polytrauma patients, nurses play a very important role, because they are responsible for managing the nursing team, and it is of great importance to carry out the institutional protocols of care, in addition to defining actions for prevention and repair, in an environment in which time is something precious for the individual who needs emergency health care to maintain their vitality (BORGES; BRAZIL, 2018). For an effective and quality assistance, the preparation of the team of professionals, training, materials and supplies are paramount not only for the team, but also for the patient and the hospital institution. The nurse plays a key role in the care of trauma victims and health institutions must train the entire team, updating and developing care protocols, among other measures that will enhance and facilitate assistance (BERTONCELLO; CAVALCANTI; ILHA, 2013). The assistance provided by nursing requires these professionals technical and scientific skills, quick and agile decision making, judgment, management, deliberation of activities, following protocols, teamwork, among others. Faced with so many attributions and complexity of care to an individual with multiple traumas, the guiding question is: What are the nursing care actions for polytrauma patients in urgency and emergency services?. The objective of the study was to analyze the nursing care actions for polytrauma patients in urgency and emergency services according to the literature.

## METHODOLOGY

The present study is an Integrative Literature Review. This type of literature review enables the analysis of existing scientific data in a systematic and comprehensive way, in which there is the favoring, characterization and dissemination of the information produced (Fernandes *et al.*, 2016). Data collection was performed from September to December 2020, in the online database LILACS (Latin American and Caribbean Literature), and in the VHL (Virtual Health Library) and SciELO (Scientific Electronic Library Online) libraries using the descriptors nursing care; polytrauma and multiple traumas. The articles included were available in full in the Portuguese language, and dated within the last five years. Dissertations, theses, incomplete articles, duplicates and abstracts that did not fit the theme were excluded. Through the initial search, 204 articles were found. Subsequently, the abstracts of the articles were read in their entirety to better understand the theme and thus ensure a greater knowledge about the issues addressed. In a second moment, after reading the articles, the inclusion criteria were applied, and 197 publications were discarded, resulting in seven articles eligible for the composition of the study. All articles were read in their entirety; then, a table was drawn up containing: article identification number, article title, authors, journal of publication, year of publication, type of article, and database and/or electronic library where it was available. Qualitative Textual Analysis was used to evaluate the studies, which is developed through a process of fragmentation of the material read (Moraes, 2016).

## RESULTADOS E DISCUSSÃO

Para facilitar na organização os resultados foram dispostos em um quadro (Quadro-1) de acordo com o título das publicações, periódico, ano, além do tipo e abordagem do estudo. Verificou-se que o ano com maior número de publicação foi 2015 com três, seguido do ano de 2019 com dois e 2018 e 2020 com um artigo cada. Os periódicos que

publicaram os artigos foram: Revista Latino-Americana de Enfermagem com dois artigos; Revista Nursing com um artigo; Revista Científica Aires com um artigo; Revista de Enfermagem UFPE com um artigo; ABCD Arquivos Brasileiros sobre Cirurgia Digestiva com um artigo e Revista Cogitare Enfermagem com um artigo. Quanto a metodologia utilizada nos artigos, cinco utilizaram a metodologia quantitativa.

## RESULTS AND DISCUSSION

To facilitate the organization, the results were arranged in a table (Table-1) according to the title of the publications, journal, year, as well as the type and approach of the study. It was found that the year with the highest number of publications was 2015 with three, followed by 2019 with two, and 2018 and 2020 with one article each. The journals that published the articles were: Latin American Journal of Nursing with two articles; Nursing Journal with one article; Sena Aires Journal of Scientific Dissemination with one article; UFPE Nursing Journal with one article; ABCD - Brazilian Articles of Digestive Surgery ABCD with one article and CogitareEnfermagemCogitare Journal Nursing with one article. As for the methodology used in the articles, five used quantitative methodology. Farias *et al.* (2020) and Paiva *et al.* (2015) recognize that after the victim is admitted to the intra-hospital environment, the nurse must be trained to establish priorities, organizing care and following the primary assessment protocols. Freitas and Franzon (2015) emphasize that the polytraumatized individual at first requires care that involves the recognition of trauma, treatment of bleeding, minimize consequences of hypovolemic shock and diagnose traumatic injuries. The response to trauma is individual, differing from one individual to another, particularities such as response to injury, use of medications, tolerance to certain procedures, are examples of the need for auxiliary markers to monitor the response to the severity of polytrauma (FREITAS; FRANZON, 2015). The polytrauma patient requires the team a total focus on their needs, in some cases the difficulty of care should be taken into account, especially if the patient is pregnant, head trauma and cervical trauma. In these cases, priorities are established in rapid assessment, classification of complexity and immediate maneuvers for the preservation of life (FARIAS *et al.*, 2020).

Thus, Araújo *et al.* (2015) state how essential a risk classification system and an evaluation system for patients. Risk classification is a procedure that identifies patients who need immediate assistance according to the imminent risk of death, using protocols and scales that stratify the risks into levels. The most commonly used in care practice are Emergency Index (ESI), Australian Triage Scale (CTAS), Canadian Triage Acuity Scale and Manchester Triage System (MTS). Another aspect that should be considered is the knowledge of how to continue the emergency care to the polytrauma patient, a study found that professionals had good knowledge about the care, having as theoretical basis the ATLS - Advanced Trauma Life Support and ATCN - Advanced Trauma Life of Nurses (ANTUNES *et al.*, 2018). The research of Farias *et al.* (2020) showed that even though nursing professionals have knowledge about the protocols, theoretical foundations, and literature recommendations, most did not use them or put them into practice later than the suggested recommendations. In the primary evaluation, the ABDCE of trauma should be performed by the nurse quickly and in a time between 2-5 minutes, aiming at identifying injuries and consequently their treatment. The secondary evaluation will take place after the patient's health condition stabilizes, performing a thorough anamnesis and reevaluating the care procedures that were performed during care (BORGES; BRAZIL, 2018). Avelar *et al.* (2016) evidenced that the nursing priorities facing a polytrauma patient should be: maintain a patent airway, monitor and prevent shock, restore blood volume and tissue perfusion if shock, correlate the mechanism of injury with the victim's clinical situation, monitor new signs of injury, preserve or restore maximum mobility, prevent orthopedic complications, promote strategies with the multiprofessional team, and prevent or minimize complications.

**Table 1. Characterization of the articles according to title, author, journal, year and methodology. Teresina, PI, Brazil (2020)**

Title	Authors	Magazine	Year	Type of methodology
Care technologies used by nursing in the care of polytraumatized patients: integrative review	ARAÚJO, A. R. C. <i>et al.</i>	Cogitare Nursing Journal	2015	Integrative literature review
Lactate as a predictor of mortality in polytrauma patients	FREITAS, A. D., FRANZON, O.	ABCD - Brazilian Articles of Digestive Surgery	2015	Observational, retrospective cohort
Readmissions by traffic accidents in a general hospital	PAIVA, L. <i>et al.</i>	Latin American Journal of Nursing	2015	Observational, retrospective study
Educational interventions on initial hospital care to polytraumatized patients	ANTUNES, M. C. <i>et al.</i>	UFPE Nursing Journal	2018	Quantitative, comparative and descriptive study
Clinical validation of the nursing diagnosis '00085 Impaired physical mobility' in multiple trauma victims	DURAN, E. C. M., FERREIRA, R. C.	Latin American Journal of Nursing	2019	Methodological, cross-sectional, clinical validation type study
Epidemiological and clinical profile of young adult patients admitted to the yellow room of the trauma center of the base hospital of Distrito Federal	ALCÂNTRA, A. A. S. <i>et al.</i>	Sena Aires Journal of Scientific Dissemination	2019	Descriptive, cross-sectional study, quantitative approach
Nursing care to polytraumatized patients seen in the emergency room	FARIAS, R. G., JESUS, H. P., ROSA, T., WILL, R. C.	Revista Nursing Nursing Journal	2020	Qualitative, descriptive study

Source: Autorial, 2020

Similar perceptions were evidenced by Alves *et al.* (2015) in relation to the primary and secondary examination of the polytraumatized individual, in which the nursing team has to be agile and effective, with the aim of reducing injuries, aggravations and mortality, for such, it is the nurse's competence to identify injuries and aggravations, as well as to manage the team, delegating to the professionals the type of assistance to be provided according to their skills and technical-scientific competence. According to Antunes *et al.* (2018) and Alcântara *et al.* (2019), the constant challenges to which nurses in hospital urgency and emergency are involved interfere with the development of care delivery. Factors such as overcrowding, inexistence or lack of compliance with protocols, lack of material, financial, and human resources, among others, are some examples that hinder the management of qualified care. Such challenges were also reported in the study by Araújo *et al.* (2015), in addition to those already mentioned, maintenance of the quality of care and the nurse's leadership were explained. Thus, it is important that there is the development of standardized and qualified systems of care through the continuing education of professionals (ANTUNES *et al.*, 2018). At the same time, the study of Farias *et al.* (2020) showed that professionals are interested in being updated, but they have to bear the costs of improvements, besides not having incentive from the hospital institutions where they work, as these professionals often have more than one job, which ends up leaving them "no time" to devote to updates. However, it is possible to observe in the study by Araújo *et al.* (2015) that through a continuing education program directed at polytrauma victims, satisfactory results were obtained, in which there was an improvement in the level of knowledge of care, as well as improvements for patients because they had lower incidences of complications related to prolonged immobility.

## CONCLUSION

The polytrauma patient requires fast, skillful assistance, based on scientific evidence and that prioritizes life maintenance, since the patient is in imminent risk of life. The study was extremely relevant for allowing the analysis of nursing care given to polytraumatized patients seen in urgency and emergency services. It was verified that the care related to the ABCDE of trauma and primary and secondary evaluations were primordial to nursing care in the intra-hospital environment. The care of polytrauma patients by nurses in the hospital environment requires agility and sequenced action according to pre-existing protocols, in order to organize and provide care that meets the different characteristics of each patient. Unfortunately, it is not always possible to follow the protocols to the letter, because internal and personal factors of the professionals end up leaving the assistance below the desired level, according to the recommendations provided in the scientific literature.

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