



NURSING AND CARE TO THE VICTIM OF BURNS: INTEGRATIVE REVIEW A ENFERMAGEM E O CUIDADO À VÍTIMA DE QUEIMADURAS: REVISÃO INTEGRATIVA ENFERMERÍA Y EL CUIDADO A LA VÍCTIMA DE QUEMADURAS: REVISIÓN INTEGRADORA

Odinélia Batista Arantes Lima¹, Aurilene Josefa Cartaxo Gomes de Arruda², Gyl Dayara Alves de Carvalho³,
Vanessa Costa Melo⁴, Alana Franco da Silva⁵

ABSTRACT

Objective: to investigate in scientific productions online of the Health area the contribution of studies that address the nursing care to burn victims between 2000 and 2012. **Method:** an integrative review, conducted in the Virtual Health Library, SciELO and LILACS database, between April and May 2012. The search was guided by the following question << *What is the contribution of studies about nursing care to burn victims in online journals of health between 2000 and 2012?* >> The sample consisted of 14 studies, being done an analysis, a categorization and a discussion. **Results:** revealed three thematic approaches: 1. General aspects and classifications of burns and 2. Main complications in burns and 3. Nursing care to the burned patient. **Conclusion:** it emphasizes the need for further studies as a way to improve nursing care to these patients and their prognosis. **Descriptors:** Burns; Nursing Care; Patient.

RESUMO

Objetivo: investigar em produções científicas on-line da área da Saúde a contribuição de estudos que contemplam os cuidados de enfermagem a pacientes vítimas de queimaduras entre 2000 e 2012. **Método:** revisão integrativa, realizada na Biblioteca Virtual em Saúde, SciELO e base de dados LILACS, entre abril e maio de 2012. A busca foi pautada pela seguinte questão << *Qual a contribuição dos estudos que abordam os cuidados de enfermagem a vítimas de queimaduras, em periódicos on-line da saúde, entre 2000 e 2012?* >> A amostra compôs-se de 14 estudos, sendo feita análise, categorização e discussão. **Resultados:** emergiram três abordagens temáticas: 1. Aspectos gerais e classificações das queimaduras; 2. Principais complicações em queimaduras e 3. Cuidados de enfermagem ao paciente queimado. **Conclusão:** ressalta-se a necessidade de novos estudos, como forma de aprimorar o cuidado de enfermagem a esses pacientes, bem como seu prognóstico. **Descritores:** Queimaduras; Assistência De Enfermagem; Paciente.

RESUMEN

Objetivo: investigar en producciones científicas on-line del área de Salud la contribución de los estudios que se ocupan de la atención de enfermería a las víctimas de quemaduras entre los años 2000 y 2012. **Método:** revisión integradora, llevada a cabo en la Biblioteca Virtual en Salud, SciELO y base de datos LILACS, entre abril y mayo de 2012. La búsqueda se basó por la siguiente pregunta << *¿Cuál es la contribución de los estudios sobre los cuidados de enfermería a las víctimas de quemaduras en las revistas electrónicas de salud entre 2000 y 2012?* >> La muestra constó de 14 estudios, que se realizan análisis, clasificación y discusión. **Resultados:** se revelaron tres abordajes temáticos: 1. Clasificaciones generales de quemaduras y 2. Las principales complicaciones de las quemaduras y 3. Cuidado de enfermería al paciente quemado. **Conclusión:** se hace la necesidad de realizar nuevos estudios, como una forma de mejorar la atención de enfermería a estos pacientes y su pronóstico. **Descriptor:** Quemaduras; Cuidados de Enfermería; Paciente.

¹Nurse, Federal University of Paraíba/UFPB. João Pessoa (PB), Brazil. E-mail: odinelia.arantes@hotmail.com; ²Nurse, Master in Public Health, Ph.D. in Health Sciences/ENSP/FIOCRUZ/RJ. Lecturer Department of Clinical Nursing, Federal University of Paraíba/UFPB. João Pessoa (PB), Brazil. E-mail: aurilene.cartaxo@hotmail.com; ³Nurse, Federal University of Paraíba/UFPB. João Pessoa (PB), Brazil. E-mail: gyl_dayara@hotmail.com; ⁴Student, B.Sc. Degree in Nursing, Federal University of Paraíba/UFPB. João Pessoa (PB), Brazil. E-mail: nessaenfermagem@yahoo.com.br; ⁵Student, B.Sc. Degree in Nursing, Federal University of Paraíba/UFPB. João Pessoa (PB), Brazil. E-mail: alanah_franco@hotmail.com

INTRODUCTION

Burns are traumatic wounds which in most cases are caused by agents thermal, chemical, electrical or radioactive. These, in turn, act in tissues that line the body, causing partial or total destruction of the skin, reaching the deeper layers as subcutaneous tissue, muscle, tendon and even bones.¹

The classification of burns can be by means of depth, that is, the skin layers that have been compromised. Thus, with increasing depth, the extent of damage increases. Thus the burned patient faces great physical suffering and consequently psychological sequelae resulting due to and / or severe left marks on his body.^{2,3}

Under this approach, patients, burn victims, deserve special attention by both the physical and psychological weakness where they are, but also the opportunity to submit nosocomial infections, considering that, besides the injury, have favorable conditions for the proliferation bacterial. Thus, it becomes essential to have an effective control of the actions to be taken before a burn, since, due to the complexity and severity; it is required, beyond the competence, skills and knowledge from the nurse to watch the burned patient.⁴

The same authors lecture that the initial care of burns victim is always done so emergency, starting immediately for treatment of conditions that put the patient's life at risk and, shortly thereafter, the assessment is made of the burned area.⁴

When it relates to patient care burn victim, it requires the work of a multidisciplinary team, with acting, among other professionals, the nurse. Thus, nursing care must be provided within 24 hours, to reduce the physical and emotional pain, fears and anxieties, attending all their assistance, technical and administrative procedures. For this, the nursing staff must have technical and scientific knowledge, and skills to deal with the emotional responses of patients and their families in order to offer an adequate primary care, followed by other care throughout treatment.^{5,6}

In this sense, justifies the choice of the theme, the difficulty in finding publications that address the nursing care to burn victims. Its importance is evidenced by the fact serve as a resource for the academic community and nurses, to deepen their knowledge about the subject. Given this premise, it is believed that an investigation of this context can guide

and entice interested in the subject, in online journals, the field of Health

Thus, the study aims to investigate scientific productions in online health area the contribution of studies that address the nursing care to burn victims between 2000 and 2012.

METHOD

The study consists of an integrative literature review. Therefore, followed rigorously, the methodology employed, by which the reader can identify key features of the publications, providing knowledge synthesis and applicability of the incorporation of significant research results in practice.⁷

The guiding question proposed for the study was as follows << *What is the contribution of studies that address the topic - nursing care to burn victims in online journals in the area of Health, between 2000 and 2012?* >>

The instrument used in this study was a standardized checklist consists of six steps: preparing the research question; establishment of the strategy literature search, selection of studies based on the inclusion criteria, critical reading, evaluation and categorization of content obtained; analysis and interpretation of results.

In order to identify publications that comprised the integrative review of this study, we conducted an online search by lifting the Virtual Health Library (VHL), and virtual library SciELO LILACS database. The keywords used were: Burns, Nursing Care and Patient. To restrict the sample, we used the Boolean operator and, together with the selected terms: Nursing Care and Burns, Burns and Patient and Patient and Nursing Care.

Data collection was conducted between April and May 2012 by means of extensive and systematic search. All studies were reviewed critically in order to minimize biases and random errors in the selection and analysis of the articles. Thus, the universe of the study consisted of 18 publications relevant to the topic, of which 14 articles were included in the sample; taking into account previously established criteria. Your rating regarding the methodological quality consisted in level 4 of evidence which establishes a non-experimental study design as descriptive correlational and qualitative.

Inclusion criteria for selecting studies consisted of the following items: articles published in Portuguese or Spanish, available in full in the period 2000-2012, the modality

scientific article (original or revised), conducted by researchers in the field of health and present context regarding the matter investigated. With regard to the exclusion criteria, we took into consideration: duplicate articles or in advance the year 2000, and those who, despite having selected descriptors, not approach directly to the proposed theme.

For the organization of content obtained after the data collected was used a framework containing the following items: year, mode of study; journal; thematic focus of this study. The data were grouped and presented in tabular form, so that would allow a better view of the studies included in the integrative review. Faced with the realization of the different approaches of nursing care to burn victims, three were listed Thematic Approaches (AT): AT1 - General and classifications of burns; AT2 - Major complications in burns; AT3 - Nursing the burned patient.

RESULTS

The analysis of the articles included in the review was initiated in order to identify the data for the year of publication, mode of study, year, mode of study; journal; thematic focus of this study.

With respect to the years of publication, the results indicated the years 2005 and 2010 with the most production with three items

each, then the years 2006, 2009 and 2011, each with two papers, the years 2000 and 2001 counted with the production of an article, each year. The study mode "original article" was present in ten publications, then the mode of review articles with four publications.

As the journal with the highest number of articles published, addressing the topic under study was the Brazilian Journal of Burns with three publications. Then the Latin American Journal of Nursing and the Journal of School of Nursing, with two studies each. Already Magazine Gaucha Nursing, Pain Magazine, Ward Global Magazine Brazilian Plastic Surgery Society, Journal of the Brazilian College of Surgeons, Interdisciplinary Journal of Experimental Studies and Brazilian Annals of Dermatology, each obtained a published study.

After successive readings of texts, different approaches have emerged on the topic, which allowed the construction of three Thematic Approaches (AT). AT1 - General and classifications of burns; AT2-Major complications in burns; AT3 - Nursing the burned patient. The AT approaches and related studies are presented in Figures 1, 2 and 3 below:

AT1-General aspects and classifications of burns		
Code	Title	Focus
AT1a	Clinical and epidemiological aspects of burned patients admitted to a teaching Hospital	Clinical and epidemiological aspects of burns
AT1b	First attendance in Burns: the approach of the dermatologist	Patho-physiological Bases and evaluation of burned
AT1c	Histophysiology and classification of Burns: local and systemic consequences of tissue loss in burned patients	Pathophysiology and classification of burns

Figure 1. Studies included in thematic approaches (AT1) and their respective approaches.

AT2 - Major complications in burns		
Code Code	Title	Focus
AT2a	Effects of enteral nutrition therapy, in burned patients, met in public hospital of Joinville/SC	Nutritional status of burned patients
AT2b	Risk factors of sepsis in burned patients	Sepsis in burned patients
AT2c	Prevalence of respiratory complications in patients hospitalized with burns in a public hospital of São Paulo State	Respiratory complications in Burns
AT2d	Infectious complications in burned patients	Infection and sepsis in individuals burned

Figure 2. Studies included in thematic approaches (AT2) and their respective focus.

AT3 - Nursing care to the patient burned		
Code	Title	Focus
AT3a	Sunburn pain: terrible for those who feel; stressful for caregivers	Relationship between pain and burns
AT3b	Perceptions of nursing staff about their work in a burned	Nursing professionals, in a burnt treatment unit
AT3c	Family nursing diagnoses of adult patients burned in the period close to the hospital	Nursing diagnoses of relatives of victims of burns
AT3d	The identification of nursing diagnoses in patients considered great burned: a facilitator for implementation of nursing actions	Nursing diagnoses according to the taxonomy of North American Nursing Diagnosis Association (NANDA), in a patient considered great burned
AT3e	Nursing diagnoses in patients admitted for burn	Nursing diagnoses of patients burn victims
AT3f	Planning for assistance to victims of burns patients: relationship between registered and prescribed care problems	Relationship between nursing diagnoses in burned patients, and care prescribed by nurses
AT3g	Participation of nursing staff in assisting the patient's pain burned	Participation of nursing staff in assisting the patient's pain burned

Figure 3. Studies included in thematic approaches (AT3) and their respective focus

DISCUSSION

◆ AT1 - General Aspects and Rating Burns

The studies used in the burns AT1 address configured in tissue injury, resulting from thermal injury and can be caused by contact with flames, liquids and surfaces at high temperatures, unacceptably low temperatures, chemicals, radiation, and even due to friction or friction.^{1,8-9}

They compromise the integrity of the skin, interfering with the electrolyte balance, temperature control, texture and hydration of the body surface, and act in the body through local action, represented by tissue coagulation necrosis and thrombosis of adjacent vessels. Damage may extend to the systemic level, in extensive burns. In these cases, the immune system is unable to delimit the systemic infection.⁸ This effect is characterized by fever; circulatory hyperdynamism; large increase in body metabolism and catabolism of proteins, deficiency of gastrointestinal barrier, and passage of bacteria and toxins to the movement; loss of heat and fluids.⁸

Lesions may involve various structures, estimated degree, according to the breadth and depth of the damage to tissues. In one context, three studies bring the classification of burns with the degree of tissue destruction, so that burns classified as grade 1 only reach the epidermis. The site of injury is characterized by redness, heat and pain, the evolution is rapid and the impact at the systemic level is minimal, generates no scars. In second degree burns, the impairment achieves not only the epidermis as part of the dermis. The site of the lesion presents with pain, redness, swelling, vesicles and blisters, erosion and ulceration, wound healing is slower and sequelae may occur. In 3rd degree burns, destruction occurs in the epidermis and

dermis, reaching other structures such as subcutaneous tissue, tendons, ligaments, muscles and bones, there is pain due to destruction of nerve endings, and blood vessels are compromised. Normally occurs a loss of function and aesthetics.^{1,8-9}

Another finding of relevance in the assessment of burns concerns the extent of the burned surface area (BSA). This should be assessed as accurately as possible, to be one of the factors that most influence the systemic repercussions and patient survival, so that exceeding 10% of body surface (BS) in children and 15% in adults, should be initiated rehydration of urgency.^{1,8-9}

One of the most practical methods for the realization of the calculation of BSA is made with reference to the palm of the patient so that, together and including the extended fingers, is 1% BSA. For a more rigorous and precise, we use the Lund and Browder diagram that takes into account the variations of each area of the body, and the age of patients.⁸⁻⁹

The location of the burns is also an important factor in the evaluation and planning of patient care, as it burns in the face, neck, hands and natural orifices have a more unfavorable due to the risk of complications, infections and functional losses.^{1,8-9}

◆ AT2 - The main complications in burns

Despite technological advances, the burns are still a significant cause of mortality, which is mainly due to the occurrence of infection and sepsis, and complications in the kidney, adrenal, cardiovascular, pulmonary, musculoskeletal, hematologic and gastrointestinal.¹⁰ Infection is a major complication of individual burned, the leading causes of morbidity and mortality in major burns, accounting for 75% to 80% of the deaths, the Centers for Burn Treatment.¹¹

After the trauma, various changes occur in the body of the individual, modifying their immune system and consequent defense mechanism, and the destruction of the natural barrier of the skin, exposure of proteins degraded and devitalized tissue, promoting an optimal environment for microbial colonization. Parallel to this, there is the further obstruction of blood vessels which delays penetration of antibiotics and immune cells in the affected region.¹²⁻³ The evolution of a simple colonization to sepsis depends on certain risk factors. Can be highlighted as main presence three or more catheters, two or more complications, BSA > 30%; burns caused by open flame, and the female.¹³

The occurrence of pulmonary complications is also quite large in burns, especially in patients with TBSA greater than 40%, and / or inhaled smoke during the accident, negatively influencing the prognosis of these individuals.¹⁰ This is because, even without smoke inhalation, patients with large BSA suffer from hypoventilation, resulting in pain or large dressing chest.¹⁰⁻¹ Approximately 33% of patients with large burns have inhalation injury, and this value increases according to the SCQ. While the inhalation injury isolated already implies a 20% increase in the mortality.¹⁰

Within the gastrointestinal tract, it must be given special attention so that early onset of nutritional support there through, prevents the translocation of bacteria, septic reducing morbidity, a hypercatabolic also decreases, reversing quickly hormonal changes and metabolism of the patient. Parallel to this, it is known that the nutritional status of the patient directly affects the repair and reconstruction of damaged tissues.¹²

♦ AT 3 - Nursing Care to the Burned Patient

Nursing care to the patient, a burn victim, correspond to a job that requires physical fitness and emotional professional. While this work is perceived as pleasurable to contribute in the process of rehabilitation of victims, is also seen as shocking, leading often to blame for the accident of families, especially when the victim is a child.¹⁴ Allied to this, acute pain related to burning has significant impact on the burned patient and staff providing nursing care, as the professionals that comprise it must be prepared to act effectively in the management of pain this individual.¹⁵ Under this view, the discussion points covered in this issue include the following approaches: concepts and conceptions, nursing diagnoses and nursing care.

In general, studies have shown that pain of sunburn is understood by nurses who provide care for burn patients, as physical and emotional, with bathing and dressing procedures are considered the most stressful, both for patients and for the professionals involved. In this context, it is necessary that nurses do not underestimate the patient's pain, understand cultural differences, and does not impose beliefs and values in their professional conduct and shall be open to adopting new ways of coping and participation in discussion groups constituting a moment of continuing education of staff.¹⁶

With regard to nursing diagnoses for patients, burn victims, the articles analyzed in this thematic approach, highlighted mainly: impaired gas exchange, ineffective breathing pattern, impaired peripheral tissue perfusion, fluid volume deficient, risk of infection, pain, impaired physical mobility, anxiety, body image disturbance. Among these, knowledge deficit and anxiety were diagnoses with the highest frequency among the family members.

These diagnoses are of utmost importance for the realization of the needs of the patient and for planning quality care, although the role of nurses currently consists only in the application of the technique, leaving in the background, a survey of the problems and needs of the patient and preventing the implementation of specific care.^{6,18} Allied to this, it is observed that nursing prescriptions and incomplete daily records leave no doubt as to the implementation of prescribed care by nurses, compromising the quality of patient care burn victim. Thus, it is necessary to record all the steps of the nursing process, so that one can observe its dynamics and to the continuation of care, since the nursing team is a base element and indispensable in the process of management of acute pain, related to burn and whose participation can influence the success and effectiveness of this type of pain relief.^{3,15}

CONCLUSION

This study is of great relevance to the practice of nursing, as burns are clinical emergencies that deserve serious consideration in the health and require a multidisciplinary approach, especially among the team members, the figure of the nurse. The nursing staff is responsible for providing care that reduces not only the physical pain but also the emotional pain, fears and anxiety, present in patients with burn victims. For this, we need technical and scientific knowledge and skills in providing quality care, integral and humanized.

We emphasize the need to develop and disseminate new studies aimed at explanation and discussion of different aspects involving the theme - nursing and burns, as a form of enhancement to the nursing staff working in the care of these patients, in order to improve the quality of care and patient outcomes well attended.

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Corresponding Address

Odinélia Batista Arantes Lima
Rua Paulino dos Santos Coelho, 661, Ap. 205-A
Bairro Jardim Cidade Universitária
CEP: 58052-570 – João Pessoa (PB), Brazil