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EXPERIENCE REPORT

The systematization of nursing Assistance in care when a patient with Anemia Falciform with Leg Ulcer

A Sistematização da Assistência de Enfermagem no Cuidado ao Paciente Portador de Anemia Falciforme com Úlcera de Perna

La Sistematización de la Asistencia de Enfermería en la Atención a Pacientes con Anemia Falciforme con Úlcera de la Pierna

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ABSTRACT

Objective: To raise the nursing diagnoses more evident and their interventions according to Nursing Diagnostic Terminology (NANDA) and Nursing Interventions Classification (NIC). **Method:** This is an exploratory study which had methodological design based on the experience of the authors in the dressing clinic in a public hospital specializing in hematology, as part of the residency program in nursing. **Results:** DE was determined eight, two and six real risk, which were described as NANDA Taxonomy I. It also sought after determination of these diagnoses, propose nursing interventions based on the Nursing Interventions Classification (NIC). **Conclusion:** The findings revealed that meet the nursing diagnoses of subjects with leg ulcers secondary to sickle cell disease is extremely important for nurses to plan individual care provided to these patients. **Descriptors:** Hemoglobin SC disease, Nursing diagnosis, Nursing.

RESUMO

Objetivo: levantar os diagnósticos de enfermagem mais evidentes e suas respectivas intervenções de acordo com Nursing Diagnostic Terminology (NANDA) e Nursing Interventions Classification (NIC). **Método:** trata-se de um estudo exploratório o qual teve seu desenho metodológico baseado na vivência dos autores no ambulatório de curativo de um Hospital Estadual especializado em hematologia, como parte do programa de residência em enfermagem. **Resultados:** foram determinados oito DE, sendo dois de risco e seis reais, os quais foram descritos conforme a Taxonomia I da NANDA. Buscou-se também, após a determinação desses diagnósticos, propor intervenções de enfermagem baseadas na Nursing Interventions Classification (NIC). **Conclusão:** os achados revelaram que conhecer os diagnósticos de enfermagem dos indivíduos portadores de úlcera de perna secundária a anemia falciforme é de extrema importância para que os enfermeiros possam planejar individualmente o cuidado prestado a esta clientela. **Descritores:** Doença da hemoglobina SC, Diagnóstico de enfermagem, Cuidados de enfermagem.

RESUMEN

Objetivo: aumentar los diagnósticos de enfermería más evidentes y sus intervenciones de acuerdo con la terminología del diagnóstico de enfermería (NANDA) y la Clasificación de Intervenciones de Enfermería (NIC). **Método:** Se trata de un estudio exploratorio que tenía un diseño metodológico basado en la experiencia de los autores en la clínica de vestir en un hospital público especializado en hematología, como parte del programa de residencia en enfermería. **Resultados:** se determinó DE ocho, dos y seis riesgo real, que fueron descritos como Taxonomía NANDA I. Además, se solicitó después de la determinación de estos diagnósticos, proponer intervenciones de enfermería basadas en la Clasificación de Intervenciones de Enfermería (NIC). **Conclusión:** Los resultados revelaron que cumplan con los diagnósticos de enfermería de pacientes con úlceras secundarias a la enfermedad de células falciformes es extremadamente importante que las enfermeras planear el cuidado individual previsto para estos pacientes. **Descriptor:** Hemoglobina SC enfermedad, Diagnóstico de enfermería, Enfermería.

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INTRODUCTION

The Anemia falciform is an inherited disease of high prevalence in Brazil. This brings together a set of genetic alterations characterized by the presence of hemoglobin (Hb) S. This gene responsible for sickle cell disease originated thousands of years in Africa. With process migration of African people during slavery gene HbS currently can be found on all continents. In Brazil due to the entry of blacks from Africa during the colonization process, and due to the intense mixing occurring between blacks, whites and Indians, this gene can be found throughout the country, regardless of skin color or ethnicity.¹

Anemia falciform is a disease of autosomatic recessive genetic character, arising from a mutation responsible for substitution of valine for glutamic acid, resulting in a hemoglobin with altered physicochemical characteristics.² Individuals suffering from sickle cell anemia when low oxygen concentrations lead a change in the conformation of erythrocytes triggering thromboembolic events. The mechanism of sickling causes some complications in the disease process of the individual, among those leg ulcer.^{1,2}

The vessel occlusion in the skin and causes tissue hypoxia and necrosis of the ankle. Platelets and leukocytes participating in this phenomenon releasing mediators of inflammation can promote the adhesion of erythrocyte and reticulocyte to the endothelium, reducing blood flow and causing tissue damage.³

This complication has chronic and interferes with the biological, psychological and social aspects of the individual. Research has shown a prevalence of 8% to 10% of this change in people with sickle cell anemia. Its occurrence is mainly in the malleolar, anterior tibialis and dorsum of the foot. The emergence of the leg ulcer can be spontaneous or due to trauma, giving high recurrence and slow healing.³

The systematization of nursing care (SAE) improves health care practice and promoting a continuum of quality care. It is a scientific methodology that has been increasingly implemented in the care provided to patients, based on the collection and analysis of health indicators that allow the exchange of information, evaluating and monitoring the quality of services provided to the population.⁴

Faced with the problems experienced by customers with anemia falciform, we observed the need to identify which systematized actions should be implemented, based on nursing diagnoses common to this clientele.

Objective

Given this theme we aim to raise the nursing diagnoses more evident and their interventions according to Nursing Diagnostic Terminology (NANDA) and Nursing Interventions Classification (NIC).

METHODOLOGY

This is an exploratory study that allows the researcher to increase his experience around a particular issue. The approach a theme and aims to create greater familiarity with respect to a fact or phenomenon.⁵

It has a qualitative approach. In qualitative research, all phenomena are equally important and accurate: the certainties of its manifestations and occasionality, frequency and interruption, speech and silence. It is necessary to find the meaning manifesto and what remained hidden.^{6:84}

This study had methodological design based on the experience of the authors in outpatient curative, a specialist in hematology State Hospital as part of the residency program in nursing.

The aforementioned clinic has as clients, people with sickle cell disease suffering from leg ulcers secondary to sickle cell anemia.

During the passage through the sector, the authors restless with the diversification of needs for nursing care and how to achieve that optimize the customer care front, conducted a survey of the main problems observed during his experience from these problems and created a framework for systematic assistance in exposing the main nursing diagnoses and possible interventions, using the Nanda nursing Diagnosis and nursing interventions Classification (NIC).

RESULTS AND DISCUSSION

As experienced researchers with the study subjects, we proceeded to a clinical judgment of nursing problems presented by this and subsequent drafting of Nursing Diagnoses (DE). Eight were determined DE, two and six real risk, which form described as NANDA Taxonomy I. It also sought after determination of these diagnoses, propose nursing interventions based on the Nursing Interventions Classification (NIC).

For each DE NIC provides several suggestions for interventions, but they selected the most suitable people with sickle cell anemia and leg ulcers. The table below contains the diagnostic findings followed their possible interventions.

TABLE 1: Diagnoses and nursing interventions according to NANDA and NIC.

NANDA diagnoses ⁷	Nursing interventions ⁸ (outpatient clinic)
Risk of infection characterized by tissue destruction	<ul style="list-style-type: none"> • Advise the patient on proper techniques for washing hands; • Ensure the use of proper technique in wound care; • Advise the patient and family about the signs and symptoms of infection and the time to report them to the health professional;
Characterized by impaired tissue integrity related to the injured tissue and impaired circulation	<ul style="list-style-type: none"> • Maintain adequate hydration to decrease the viscosity of blood; • Advise the patient on proper care of the feet; • Avoid applying pressure or tourniquet to the affected extremity;
Ineffective peripheral tissue perfusion characterized by delayed wound healing and peripheral related to poor knowledge of aggravating factors	<ul style="list-style-type: none"> • Make a complete assessment of peripheral circulation (eg, checking peripheral pulses, edema, capillary refill, and color temperature); • Examine the skin in search of stasis ulcers and tissue disruption; • Protect the edge against injury;
Risk of falls characterized by difficulty in walking	<ul style="list-style-type: none"> • Identify environmental characteristics that increase the potential for falls; • Avoid accumulation of objects on the floor; • Monitor gait, balance and level of fatigue with ambulation;
Chronic pain characterized by facial expression and irritability related to physical disability and	<ul style="list-style-type: none"> • Conduct a comprehensive assessment of pain, including location, features, beginning \ duration, frequency, quality, intensity and severity, and precipitating factors;

chronic	<ul style="list-style-type: none"> • Consider cultural influences on pain response; • Determine the impact of the experience of pain on quality of life;
Impaired social interaction characterized by social awkwardness and self-related disorder	<ul style="list-style-type: none"> • Encourage the patient to change the environment, such as going for a walk or go to the movies; • Promote the sharing of common problems with others; • Confronting about impaired judgment, where appropriate;
Anxiety is characterized by uncertainty, anxiety and nervousness related to threat to health	<ul style="list-style-type: none"> • Keep calm and firm attitudes; • Sit down and talk with the patient; • Reduce or eliminate stimuli generators of fear or anxiety;
Body image disorder characterized by real change in the structure and related injury	<ul style="list-style-type: none"> • Helping the patient to identify the priorities of life; • Helping the patient to identify a source of motivation;

Source: Authors.

Evidenced in our practice that the study subjects, have Infection Risk. This DE can be understood as the state where the body has an increased risk of invading pathogens.⁷

Such diagnosis is easily observed in individuals with skin lesions where there is tissue destruction and inadequate primary defenses. Tests reveal the presence of single or multiple infection in leg ulcers secondary to sickle cell anemia, and the most commonly found microorganisms *Staphylococcus aureus*, *Streptococcus* and *Pseudomonas*.⁹

Faced with the panorama of the proposed interventions, one realizes that they apply to most DE quoted above are: counsel patients on proper techniques for washing hands; ensure the use of proper technique in wound care and orient the patient and family about the signs and symptoms of infection and the time to report them to the health professional.

The mechanism of polymerization and cell sickling in sickle cell disease these culminate in poor circulation, followed by tissue hypoxia and increased probability of onset of ulcerative lesion on the lower limbs.

This process makes the common DE Impaired Tissue Integrity. This definition is to damage the mucous membranes, cornea, skin or subcutaneous tissue. In this population, the defining feature and should factor related to the injured tissue and impaired circulation respectively.

Facing it found that the most common interventions to DE would Impaired Tissue Integrity: Maintain adequate hydration to decrease the viscosity of blood, Advise patients about proper foot care and Avoiding tourniquet or apply pressure to the affected extremity.

The pathophysiology of these lesions have a multifactorial etiology, but tissue hypoxia, changes in the endothelium and mechanical traumas are characteristics prevalent. This process meant that we could identify the DE Tissue Perfusion Peripheral Ineffective, that this clientele was characterized by delayed wound healing and had as one of the factors related to poor knowledge of aggravating factors or causes.

Interventions proposed by NIC to DE Ineffective Tissue Perfusion performing a full evaluation of peripheral circulation (eg, checking peripheral pulses, edema, capillary refill, and color temperature); examination of the skin in search of stasis ulcers and tissue disruption and endpoint protection against injury are those that best applies.

The DE Chronic Pain is also present and can be perceived as unpleasant sensory and emotional experience arising from actual or potential tissue damage or described in terms of such damage.

The complications are recurrent painful crises in sickle cell anemia. They are determined by ischemic tissue damage secondary circulatory changes resulting from altered erythrocytes. The elimination or reduction of precipitating factors should be the goal of interventions¹⁰.

To intervene against this DE must: conduct a full evaluation of pain, including location, features, beginning \ duration, frequency, quality, intensity and severity, and precipitating factors; considering cultural influences on pain response.

We checked the DE Impaired social interaction in many subjects and had as its defining characteristic discomfort in social situations and the factor related disorder in self-concept.

The existence of a wound culminates in a process of disorganization in your body chemistry and emotion, ie a body with wound print new signs; reacts to changes and new feelings are awakened before the injury which often will change the way how the individual sees society.¹¹

The NIC proposed as measures for such interventions DE has been: encourage the patient to change the environment, such as going for a walk or going to the cinema, to promote the sharing of common problems with others; confront about impaired judgment, where appropriate.

Another DE Anxiety was evident he had with factor related uncertainty, nervousness and anxiety and being related to a threat to health. Studies show that when caring for a person with wounds, should be considered their emotions, fears, embarrassment, loss of self-image and other situations that can cause anxiety episodes.¹¹

Nurses must intervene, according to NIC before this DE with maintaining calm and firm attitudes, sit and talk with the patient and reduce or eliminate stimuli generators of fear or anxiety.

Finally, our experience with these guys we did detect the Body Image Disturbance OF characterized by real change in structure is related to injury. The presence of such a diagnosis is confirmed through discussions related to the psychological aspects of living with a skin lesion already explained in this text. And nursing interventions for this are: to help the patient identify the priorities of life and identify a source of motivation.

CONCLUSION

Knowing the nursing diagnoses of people with leg ulcers secondary to sickle cell enables nurses that work in clinics or dressing room can plan individual care provided to clients.

In possession of DE, the nurse must propose specific interventions to subjects, ie, unique and effective actions to resolve the problems identified.

Therefore, we conclude that the SAE is in the process of construction and implementation in Brazil, and that it allows the application of technical-scientific practice nurse in a standardized manner coupled with quality. However, in this study, we look at the NANDA little specificity regarding the factors related to person with sickle cell anemia patient with leg ulcers. Another issue identified was that the interventions proposed by the NIC, not fully contemplate the clientele studied, ie customers outpatients.

Nevertheless, we believe that this research can serve as a basis for implementation of the nursing process in the care of people with sickle cell disease on an outpatient basis.

REFERENCES

1. Kikuchi BA. Assistência de enfermagem na doença falciforme nos serviços de atenção básica. Rev. Bras. Hematol. Hemoter. São José do Rio Preto, v.29, n.3, p.331-338, jul./set. 2007.

2. Lemonica L, BARROS GAM, Fujimoto O, Couceiro TCN, Curti I. Analgesia controlada pelo paciente com Tramadol em criança portadora de anemia falciforme. Relato de caso. Rev. Bras. Anesthesiol. 49 (4), p. 263-5, 1999.
3. Paladino SF. Úlcera de membros inferiores na anemia falciforme. Rev. Bras. Hemotol. Hemoter. 29(3), p.288-290, 2007.
4. Tannure MC, Pinheiro AM. Sistematização da Assistência de Enfermagem: Guia Prático. 2ªed. Rio de Janeiro: Guanabara Koogan, 2011.
5. Leopardi MT, Metodologia da Pesquisa na Saúde. Santa Maria: Pallotti, 2001.
6. Chizzotti A. Pesquisa em Ciências Humanas e Sociais. 5ªed. São Paulo: Cortez, 2001.
7. Nanda Internacional, Diagnósticos de Enfermagem da Nanda: Definições e Classificação - 2009/2011. São Paulo: Artmed, 2009.
8. Dochterman J, Butcher HK, Bulechek GM. Classificação das Intervenções de Enfermagem - NIC. 5ªed. Rio de Janeiro: Elsevier, 2008.
9. Brasil. Ministério da Saúde. Manual de Diagnóstico e Tratamento de Doença Falciforme. Brasília: ANVISA, 2002.
10. Brasil. Ministério da Saúde. Departamento de Atenção Especializada. Manual de Condutas Básicas na Doença Falciforme. Brasília: Ministério da Saúde, 2006.
11. Silva RCL *et al.* Feridas: fundamentos e atualizações em enfermagem. 2ªed. São Paulo: Yendis, 2007.

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