Systemic Lupus Erythematosus: case report using the Nursing Process

Lúpus Eritematoso Sistêmico: relato de caso utilizando o Processo de Enfermagem

ABSTRACT
Objective: to apply the Nursing Process to a patient with Systemic Lupus Erythematosus who developed chronic kidney disease and diabetes mellitus. Method: this is a case study developed throughout the practical activities of the Nursing Care Systematization discipline during a Nursing Course in the city of Caxias, MA. The data was obtained through anamnesis and insightful examination physical, from which the nursing diagnoses and planning were elaborated and the necessary interventions and evaluations were performed. Results: the results were presented over the Nursing Process applied to the patient in question through the collection of information, making it possible to do a critical judgment of each diagnosis presented by the patient, as well to establish the expected results, implementations and evaluation of Nursing in a systematized and individualized way. Conclusion: the systematic and individualized assistance allowed better organization of work and nursing care besides enable greater understanding of the patient about their condition and acceptance process.

RESUMO
Objetivo: aplicar o Processo de Enfermagem a uma paciente com Lúpus Eritematoso Sistêmico, que desenvolveu doença renal crónica e diabetes mellitus. Método: trata-se de um estudo de caso desenvolvido durante as atividades práticas da disciplina Sistematização da Assistência de Enfermagem, de um Curso de Enfermagem da cidade de Caxias, MA. Os dados foram obtidos por meio da anamnese e de exames físicos criteriosos, a partir dos quais foram elaborados os diagnósticos de enfermagem e o planejamento e realizadas as intervenções necessárias e as avaliações. Resultados: os resultados foram apresentados por meio do Processo de Enfermagem aplicado à paciente em questão por meio do levantamento de informações, possibilitando fazer o julgamento crítico de cada diagnóstico apresentado pela paciente, bem como estabelecer os resultados esperados, implementações e avaliação de Enfermagem de forma sistematizada e individualizada. Conclusão: a assistência sistematizada e individualizadora permitiu uma melhor organização do trabalho e dos Cuidados de Enfermagem, além de possibilitar o maior entendimento da paciente acerca da sua condição e processo de aceitação.


INTRODUCTION

Systemic Lupus Erythematosus (SLE) is a chronic multisystemic inflammatory disease with autoimmune characteristics and unknown etiology, having a wide variety of clinical manifestations, related to genetic, environmental and hormonal factors, predominantly affecting women during childbearing years and it is more likely to develop severe symptoms in blacks and Asians. It is a potentially serious condition, a vasculitis of the medium and small vessels in which all organs are subject to damage, including those whose function is vital for survival, such as the heart, lungs, kidneys and central nervous system, causing other several and chronic diseases. However, with a new therapeutic arsenal and early diagnosis, the acute crises of the disease can be better controlled (1).

This study deals with the case report of a patient diagnosed with SLE, who developed chronic renal failure (CRF) and diabetes mellitus (DM). Chronic kidney disease is characterized by the loss of kidney function, being progressive and irreversible, compromising the functions of the kidneys, which are responsible for blood filtration, control of water volume and hormone production, and causing symptoms such as edema in the lower limbs, difficult to control hypertension and proteinuria (2). Diabetes mellitus (DM), in turn, refers to a metabolic disorder of heterogeneous etiologies, characterized by hyperglycemia and disturbances in the metabolism of carbohydrates, proteins and fats, resulting from defects in the secretion and/or action of insulin (3).

Under these conditions, it is up to the nursing team to promote effective and comprehensive care, with a view to improving the quality of life of patients affected by such conditions. In this way the Nursing Process is a methodological tool used in order to make systematic nursing care, guiding the work of the team regarding the promotion of quality of care provided due to clinical reasoning and decision-making, formulating nursing diagnoses and care planning, in addition to implementing the planned actions and evaluating the entire doing (4).

This study aimed to apply the Nursing Process in a humanized, comprehensive and individualized way to a patient with Systemic Lupus Erythematosus, who developed chronic kidney disease and diabetes mellitus.

METHOD

This is a descriptive study, of the case study type, with a qualitative approach, applied to a patient affected by Systemic Lupus Erythematosus. The study was carried out between April 11 and 22, 2018, in a public hospital with regional coverage, in Caxias, MA. It is noteworthy that the case report consisted of an activity developed in the sixth block of the Nursing Course at a University Center, referring to an activity in the Nursing Care Systematization discipline. This study was conducted and reported in accordance with the COREQ guidelines (Consolidated Criteria for Reporting Qualitative Research), in order to validate this report (5).
patient, it was possible to provide comprehensive, individualized and equanimous care focused on her needs and improvement in her health conditions.

RESULTS

The results are presented through the demonstration of the Nursing Process applied to the patient in question. Thus, initially, the information collected through the clinical history or anamnesis and physical examination will be exposed, including the results of exams contained in the patient's medical record.

STEP 1: Nursing History

This is the first stage of the Nursing Process, it is obtained through the collection of information from the Anamnesis and Physical Examination, together with data regarding the performance of complementary exams, when applicable, according Table 1.

Table 1 - Disposition of the Nursing History (history and physical examination). Caxias-MA, 2018.

<table>
<thead>
<tr>
<th>ANAMNESIS</th>
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<tbody>
<tr>
<td><strong>Identification</strong></td>
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<tr>
<td><strong>Main Complaint</strong></td>
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<tr>
<td><strong>History of Current Disease</strong></td>
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<tr>
<td><strong>Personal background</strong></td>
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<tr>
<td><strong>family history</strong></td>
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<tr>
<td><strong>Social Habits and Life Habits</strong></td>
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<th>PHYSICAL EXAM</th>
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<tr>
<td><strong>Ectoscopy</strong></td>
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<td><strong>Head and Neck</strong></td>
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<tr>
<td><strong>Respiratory system</strong></td>
</tr>
<tr>
<td><strong>Cardiovascular system</strong></td>
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<tr>
<td><strong>Abdomen</strong></td>
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<tr>
<td><strong>Digestive System</strong></td>
</tr>
<tr>
<td><strong>Genitourinary System</strong></td>
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<tr>
<td><strong>Musculoskeletal System</strong></td>
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<td><strong>SSVV</strong></td>
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</table>

Source: Direct research, 2018.

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<table>
<thead>
<tr>
<th>DIAGNOSTICS OF NURSING (NANDA)</th>
<th>EXPECTED RESULTS (NOC)</th>
<th>NURSING INTERVENTIONS (NIC)</th>
</tr>
</thead>
</table>
| Impaired gas exchange related to ventilation-perfusion imbalance, evidenced by altered respiratory rhythm, depth | Equilibrium of ventilatory perfusion. 3 - 5 | • Position the patient to relieve dyspnea;  
• Listening to respiratory sounds, observing areas of reduced or absent ventilation and the presence of adventitious noises;  
• Monitor respiratory condition and oxygenation;  
• Encourage slow, deep breathing and change of position. |
| Situational low self-esteem related to disturbed body image, evidenced by self-negating verbalizations and reports of feelings of unimportance. | Self-acceptance verbalization 2 - 5 | • Monitor the patient's self-valuing statements;  
• Strengthen the identified personal positives;  
• Transmit confidence in the patient's ability to deal with the situation  
• Reward or praise the patient's progress toward goals;  
• Make positive statements about the patient. |
| Readiness for enhanced knowledge, evidenced by demonstration of knowledge about the topic. | Reputable Health Care Resources 3 - 5 | • organize information from simple to complex, known to unknown, or concrete to abstract, as appropriate;  
• Adapt the information to meet the patient's lifestyle/routines;  
• Offer educational materials that exemplify important information and/or complications;  
• Provide time for the patient to ask questions and discuss her concerns;  
• Answer questions clearly and concisely. |
| Excess fluid volume related to compromised regulatory mechanisms, evidenced by altered pulmonary artery pressure. | Venilatory perfusion balance 2 - 4 | • Monitor frequency, depth and effort in breathing;  
• Record chest movements observing the existence of symmetry, use of accessory muscles and retraction of supravclicular and intercostal muscles;  
• Palpate in search for equal lung expansion;  
• Listening to respiratory sounds, observing areas of reduced/absent ventilation and presence of adventitious noises;  
• Monitor the occurrence of increased restlessness, anxiety and shortness of breath. |
| Decreased cardiac output related to altered heart rhythm, as evidenced by Heart palpitations. | Adventitious breath sounds 1 - 4 | • Listen to heart sounds;  
• Listen to the lungs for the appearance of crackles and other adventitious noises;  
• Monitor kidney function;  
• Monitor laboratory values for electrolytes, which can increase the risk of arrhythmias;  
• Obtain a chest X-ray if appropriate. |
| Chronic pain related to Chronic musculoskeletal diseases, evidenced by Proxy report of activity changes and Facial expression of pain. | Description of causative factors 2 - 4 | • Perform a complete pain assessment, including location, characteristics, onset/duration, frequency, quality, intensity and severity;  
• Ensure accurate analgesia care;  
• Investigate the patient's knowledge and beliefs about pain;  
• Investigate the factors that relieve/worse pain;  
• Choose and implement a variety of measures (p. G., Pharmacological, non - pharmacological, interpersonal) to facilitate relieve of pain, as appropriate. |
| Impaired physical mobility related to decreased muscle strength and musculoskeletal impairment, evidenced by Decreased fine and gross motor skills | Walk short distances 1 - 4 | • Provide a low height bed as appropriate;  
• Advise on availability of auxiliary devices;  
• Guide the patient/caregiver on ways to position themselves during the transfer and walking process;  
• Help to the patient with the initial ambulation and as needed;  
• Encourage independent walking within safe limits. |
| Readiness for enhanced health self-management, evidenced by expression of desire to control the disease (eg, treatment, prevention of sequelae). | Well-developed health behavior performance 4 - 5 | • Assist the patient to develop confidence her own ability, as appropriate;  
• Explain how the information will help to reach her goals;  
• Help the patient to become aware of the susceptibility to complications;  
• Help the patient to recognize the ability to control the progression of the disease;  
• Help the patient to realize that the current situation is different from any previous stressful situation. |
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Table 2 - Disposition of Nursing Diagnoses, Expected Outcomes and Nursing Interventions. Caxias-MA, 2018. (Conclusion)

<table>
<thead>
<tr>
<th>DIAGNOSTICS OF NURSING (NANDA)</th>
<th>EXPECTED RESULTS (NOC)</th>
<th>NURSING INTERVENTIONS (NIC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impaired skin integrity related to mechanical factors, medical devices, shearing forces, Surface friction Pressure over bony prominence) and immobilization, as evidenced by Disrupted skin surface.</td>
<td>Skin integrity. 3 - 5</td>
<td>• Avoid using bed linen with a rough texture; • Massage around the affected area; • Avoid providing local heat applications; • Keep bed linen clean, dry and free from wrinkles; • Document the degree of skin/tissue degradation.</td>
</tr>
<tr>
<td>Risk for electrolyte imbalance, related to Insufficient fluid volume, Renal dysfunction.</td>
<td>Balance between ingestion and elimination within 24 hours 2 - 4</td>
<td>• Monitor the occurrence of manifestations of electrolyte imbalance; • Keep accurate records of ingestion and elimination; • Teach patient and family about the type, cause and treatments for electrolyte imbalance; • Monitor the patient's response to electrolyte therapy; • Monitor vital signs as appropriate.</td>
</tr>
<tr>
<td>Risk for infection related to Immunosuppression, chronic illness and invasive procedures</td>
<td>Identification of infection risk in everyday situations 3 - 5</td>
<td>• Monitor vulnerability to infection; • Examine the skin and mucous membranes for hyperemia, extreme heat or drainage; • Guide patients and families on ways to prevent infection; • Teach patient and family about the signs and symptoms of infection and when to inform professionals; • Examine the condition of the incision.</td>
</tr>
</tbody>
</table>

Source: Direct research, 2018.

STEP 4: Implementation

Regarding the fourth stage of the Nursing Process, all the interventions mentioned above were implemented and others that could not be demonstrated in this article for reasons of space regulation in terms of pages.

STAGE 5: Nursing Assessment or Evolution

In the last step of the Nursing Process, an assessment of the patient's health conditions was carried out, noting that she obtained a considerable improvement in her general, social-emotional and self - confidence conditions. Surely, the patient came to better understand her condition, adjacent conditions and the necessary therapies, which generated the Health Promotion Nursing Diagnoses. It is noteworthy that the evolution of the second day of hospitalization was made available for knowledge:


DISCUSSION

SLE is a potentially serious disease, which can cause serious damage to the affected organs, that can lead to the emergence of other acute and chronic diseases, as occurred with the patient in question, who acquired Chronic Kidney Failure, culminating in the need for hemodialysis. The treatment aims to control the disease, aiming at the prevention of acute overbreaks of vasculitis, avoiding the progression of damage to the affected organs and keeping the disease in remission, reducing the impacts on quality of life (1,12). Nursing presents itself as a professional area capable of offering possibilities that provide SLE patients with an independent and autonomous life based on the identification of risk factors, as well as promoting actions to minimize the problems arising from this disease and its complications, and contributing the maintenance the quality of life.

Among the Nursing Diagnoses (ND) formulated during patient care, the most important ones were presented in this manuscript (Table 2) and, for didactic purposes, they will be subdivided into four groups, according to the main areas affected in a
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Nursing can promote precious interventions to improve the patient's living and health conditions, such as promoting a calm environment for sleep and rest, strictly controlling the fluid balance, checking daily fasting weight, evaluating general and nutritional status, maintaining adequate pressure levels, assisting venous access and other invasive devices for phlogistic signs, evaluate pain, administer analgesics, avoid beds with direct sunlight, evaluate laboratory test results, offer urea-based creams for hydration skin; encourage and guide self-care, provide information about the disease and treatment and emotional support.

In SLE, drugs like anti-inflammatory drugs, corticosteroids, antibiotics, analgesics, anti-serous drugs, anti-emetics and immunosuppressants were the groups of drugs used in the treatment of the patient, seeking to reduce symptoms, control pain, prevent arthritis and skin manifestations, with a view to preventing the progression of the disease to other organs, prevention of gastric ulcers, nausea and vomiting.

The evolution of patients with SLE is variable and requires individualized Nursing Care and careful surveillance by professionals. Accordingly, the diagnoses raised about the patient were based both on real problems and on potential problems related to improving the condition of health. The application of the NP allowed us to verify that the patient evolved with a significant improvement in her clinical condition, and among the improvements we can mention: expansion of knowledge about the disease; emotional support; pain and symptom control; monitoring of organs such as heart, lung, kidneys, etc., which are essential to improve the patient's quality of life and to prevent/contain complications.

For Garcia and Nóbrega, the resolution and prevention of identified problems and formulated diagnoses are carried out through Nursing Interventions, which are methods/means used by professionals to be followed for a certain period of time with the objective of improvement and reduction of risks in the patient's quality of life.

In Nursing Interventions, they determined the time, schedule and intervals for the care to be fulfilled in order to develop care in an organized, comprehensive and safe way; both in the period of hospitalization and in the planning of discharge, through the instructions provided. Furthermore, after implementation, the evaluation process took place, in which the benefits of the behaviors were analyzed, seeking results that would favor an improvement in health.

The fact is that the NP can and should be applied in all sectors and health services where there is nursing care, including to all people, regardless of age group and health condition. In this sense, a research returned in Maranhão deals with an intervention proposal for parents/caregivers of people with Autism Spectrum Disorder, based on the Adaptation Theory by Callista Roy. Thus, adaptive problems were found in the Physiological Mode, such as indigestion/abdominal discomfort, sleep disturbance, agitation, lack of energy, inability to relax, crying, difficulty concentrating, fear that the worst will
happen, fear of dying; stunning and nervousness; along with the Self-Concept Mode, referring to issues such as loss of pleasure, irritability, tiredness or fatigue and self-criticism; and also, Function Mode in real life, when they detect devaluation, fear of losing control and indecision; and finally, in the Interdependence Mode, from the loss of interest in sex and loss of interest.

This study enabled the patient to improve knowledge about her condition, even as to know how to improve her health conditions through the provision of information and her care plan, it also enabled the feeling of welcoming and individualized attention, providing well-being and safety. The study also allowed to deepening the knowledge about the conditions presented by the client, enabling to combine theory with praxis, from a closer and individualized contact with her, as making it possible to understand how to act in similar cases, with a view to preventing complications and improving their quality of life.

The limitations of the study were based on the fact it is a chronic and systemic condition and that brings with it a number of changes, and present major complications requiring nursing demands that could not always be met. Furthermore, in the hospital in question, the Systematization of Nursing Care is not fully implemented and the nursing process is not a reality.

**CONCLUSION**

The case report addressed a patient with Systemic Lupus Erythematosus and chronic renal failure undergoing hemodialysis and diabetes mellitus resulting from the disease. The work was important because it allowed deepening the knowledge about the conditions reported, which made it possible to combine theory with praxis, from a closer and individualized contact with it, as well as understanding how to act in similar cases, with a view to preventing intercurrences and improve the quality of life of patients with SLE.

The present work allowed the patient more knowledge about her condition, besides knowing how to proceed to improve her health through the provision of information and her care plan, which also enabled the feeling of welcoming and individualized attention, providing well-being and safety.

Moreover, the use of the Nursing Process in this study ensured the development of organized and systematized care, promoting efficient practice and coherent nursing care, directing critical judgment and decision-making, providing interaction between professionals, students and patients, seeking to improve their self-esteem and their understanding of the disease and acceptance process.

**REFERENCES**


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