

# Nursing Care for Patients with Systemic Lupus Erythematosus Based on the Environmental Theory

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**Abstract**— Systemic Lupus Erythematosus (SLE) is an inflammatory, autoimmune, chronic disease of unknown etiology that can affect several organs and tissues. Parallel to this, the environmental theory, has as focus the environment, and the role of nursing is to maintain the balance of this environment, prioritizing the provision of an environment that stimulates and facilitates the development of health for the patient. Therefore, an educational action was proposed to promote a greater explanation and approach about the environmental conditions that the individual will be exposed to and which will influence the exacerbation of the disease. The activity was developed through the problematization methodology by the Arco de Maguerez. Explanatory folders were prepared containing information and guidance on the disease and the care related to environmental factors that could trigger a manifestation or possible reactivation of the pathology was emphasized. There was a great acceptance of the material distributed by the students and strong interaction between patients and the health team, through questions directed to the students at the time of the explanation and exposure of the folders, which were instantly remedied, in a way that evidenced the absorption of the information. guidelines passed on and sensitized patients to change habits. Therefore, health professionals are fundamental agents of change, who use their power of influence to promote the change of habits and stigmas that are disseminated by the lack of information, providing greater understanding and knowledge about the variables of the disease, and the necessary care for maintaining the health of SLE patients.

**Keywords**—Health Education, Nursing, Systemic Lupus Erythematosus, Experience Report, Nursing Theory.

## I. INTRODUCTION

Systemic Lupus Erythematosus (SLE) is an inflammatory, chronic disease of unknown etiology that can affect several organs and tissues. It manifests itself in an autoimmune manner, being characterized by the presence of autoantibodies that are directed against the cells of the body itself. The cause is not fully understood, however, the development of the disease is linked to genetic predisposition and environmental factors, such as ultraviolet light and some medications (Borba et al., 2008). In addition, it is a disease of low incidence that affects mainly women and young people, affecting women 10 to 12 times in the reproductive phase, in relation to men and, although it can occur at any age, it is more frequent in adulthood, with greater incidence close to 30 years old (Bittencourt; Beserra & Nóbrega, 2008).

The disease progresses in a chronic way and has periods of latency and remission. The clinical manifestations of SLE can be general, in which the most frequent are: skin lesions characterized by the presence of erythema in the shape of a butterfly wing or evening, on the cheekbones and back of the nose, and the discoid lesions that are well defined and deep; joint pain and edema; inflammation of the lung and heart membranes (Pleura and Pericardium); Inflammation of the kidney; Changes in blood composition, such as decreased erythrocytes (anemia), leukocytes (leukopenia), lymphocytes (lymphopenia) or platelets (thrombocytopenia), in addition to inflammation in the small vessels (vasculitis). In addition, some symptoms of lesser incidence can also occur in the latent phase of the disease, such as enlarged liver, spleen and lymph nodes (Bittencourt et al., 2008).

According to Robbins and Cotran (2010) genetic factors are one of the fundamental causes for the development of the disease, however, environmental factors also have great relevance in their pathogenesis. In this context, it is worth noting that exposure to ultraviolet (UV) light exacerbates the disease in many individuals. This is because UV irradiation can induce cell death and can alter DNA in such a way that it becomes immunogenic, that is, it stimulates an immune system response. In addition, exposure to sunlight can modulate the immune response, as it induces skin pigment cells (keratinocytes) to produce a substance that is known to promote an inflammatory response.

In this context, Nightingale (1989) - considered the precursor of nursing - developed the environmental theory, in which the environment is the main focus, according to her, the environment encompasses external conditions and

influences that directly affect the life and development of the organism, having the ability to prevent, suppress or contribute to disease and death. Thus, the body tends to respond to nature in a subtle or exaggerated way, for example in places of high or low temperature and / or high or low humidity, one can observe the manifestations of diseases that have a characteristic epidemiology, which are characterized as epidemics. This, then, reaffirms the scope of the environmental theory that nature has the ability to interfere directly and indirectly in the health of the individual (Nightingale, 1989). In this theory, the disease is considered a health restoration process, and the role of nursing is to balance the environment, offering the minimum conditions of recovery, such as ventilation, air, water, cleaning and heat in order to conserve the patient's vital energy in order to recover from the disease, prioritizing the provision of an environment that stimulates and facilitates the development of health for the patient (Nightingale, 1989).

Furthermore, in the environmental theory, communication with the patient is essential, as it is seen as part of the principles of care, since through it, it will be possible to evaluate the conditions of the patient's emotional and physical state as well as obtain the complaints provided by him (George, 1993). This exposes the great importance of communication so that more efficient assistance occurs, as it is necessary to have an open and honest conversation about the real conditions of the patient, allowing, then, the nurse to inform and provide the appropriate care, as well as the patient has the duty to follow the guidelines and care provided for better health recovery.

From Florence's theory, it is possible to perceive the human being as part of nature, being seen as an individual, whose natural defenses are influenced by a healthy environment or not. He also believed that providing an adequate environment was the differential in the recovery of patients, and it is this precept that underlies the theory (Nightingale, 1989). In this sense, having Nightingale's (1989) theory of ambience as a foundation, it is necessary to have a greater explanation and approach about the environmental conditions that the individual will be exposed to and that may influence the exacerbation of the disease.

In this perspective, this article aims to report the experience of nursing students in carrying out an educational action based on the Environmental Theory to patients with Systemic Lupus Erythematosus (SLE) in a public hospital in Belém / PA, in which it was used illustrative folders, in order to explain to the patient the factors that may influence the manifestation of the

pathology symptoms, the conditions in which he will be exposed, as well as the complications and the necessary care that he must acquire due to the return to his environment of housing, since this is one of the main points for the recovery and maintenance of the patient's health.

## II. MATERIALS AND METHODS

This is an experience report from the second semester of 2019 made by five nursing students from the discipline Nursing Theory / Semiology and Semiotics on the realization of an Integrated Health Activity (AIS) whose theme is Nursing Assistance to the patient that bears Systemic Lupus Erythematosus (SLE) based on the Environmental Theory that took place at the Public Hospital of Belém / PA.

AIS aims to develop projects and integrate several areas of knowledge, especially those related to health promotion and education through progressive actions in order to develop critical analysis of the student, developing creative and efficient activities aimed at the community and for nursing care.

The elaboration of the activity was developed through the problematization method by the Arco de Maguerez. It consists of five steps: Observation of reality; Survey of key points; Theorization; Solution hypotheses and Return to reality (Berbel, 2011). Based on that, proposals for themes to be addressed were developed.

The observation of reality occurred in the practice periods from 08/28/2019 to 09/18/2019, when students identified a high incidence of hospitalizations of patients with SLE, in this perspective, it was considered necessary to approach the present theme. The survey of key points was drawn from debates held between the members of the group and their advisor, in which was sought to identify the relationship between pathology and Florence Nightingale's environmental theory.

For theorizing, the students followed the guidelines made by the guiding teacher, which consisted of the search for theoretical and scientific material, such as studies and research about SLE, the Environmentalist Theory and the methods of nursing care necessary to improve the patient's quality of life. From this, theoretical bases were searched in articles and official documents, in the electronic media accessing Google Scholar, Periodicals Capes and MedLine, the library of the Magalhães Barata Nursing School was also used.

Following the fourth stage of the Arc, hypotheses for solution were pointed out according to the observed reality

and its limitations. Health education as nursing care for patients with SLE was the method chosen by the group to address the issue in question with the target audience, considering that assistance through this strategy tends to promote patient awareness of the importance of changing habits, attitudes and behaviors, which can significantly improve the individual's quality of life. It was also decided to carry out the action with the hospital's nursing team, in order for them to pass on the guidelines to the next patients who come to be attended by the institution.

To carry out the action, explanatory folders were prepared containing information and guidance on the disease, in which, in addition to the common care to keep the immune system high, care related to environmental factors that could trigger a manifestation or possible reactivation of the pathology was emphasized, among which were listed: quality of sleep and rest, frequent use of sunscreen, physical activity, especially aerobics, consumption of healthy foods (fruits and vegetables), restriction of alcoholic beverages and smoke and personal hygiene care, being extremely important for the prevention of infections. In addition, some myths and truths about SLE were selected in order to demystify to the patient erroneous information that is propagated by society and to clarify pertinent doubts, for example, if the woman with Lupus can become pregnant.

The return to reality, phase of the Arc in which the action takes place, took place on October 16, 2019 in the afternoon shift, from 2 pm to 5 pm, in which the target audience present were female patients, and the activity was carried out in their beds themselves due to the needs of mobility impaired by the disease, as well as for health professionals, folders were presented at the team's own nursing post.

## III. RESULTS AND DISCUSSION

During the educational action, the students started identifying themselves and presenting the educational institution, as well as the work to be exposed, about what it was about, the objective and importance of its accomplishment. Then, the students presented the folders and explained their respective contents, explaining about the disease, what the individual should know about their condition, the care needed to control the disease and the circumstances by which they would be exposed, taking into account risk of evolving to a more aggressive condition of the disease if adequate treatment was not carried out.

There was a great acceptance of the material distributed by the students, as well as strong interaction between patients and the health team, through questions directed to

students at the time of explaining and exposing the folders, which were instantly remedied, so that it showed the absorption of the guidelines passed on and made patients aware of the change in habits

#### IV. FINAL CONSIDERATIONS

The stages of the work made it possible for students to identify the patient's needs regarding the care that must be provided and the real importance that nursing care has in maintaining the health of the individual, both in the hospital and in the living environment. This reinforces the idea that health care practiced by nurses should not be restricted to the hospital environment alone, but must pass through the walls of the infirmary and allow oriented care to reach the client's place of living.

In addition, it should be noted that the study described has great relevance in the current scenario, because despite the high incidence of the disease, there are few studies that cover nursing care aimed at patients with Lupus. Parallel to this, it is observed the importance of carrying out the work and the impact it will bring to the improvement of the patients' quality of life, because as guided and explained by the students, the care given is essential for the control of the pathology and improvement of your clinical condition.

Thus, health professionals are fundamental agents of change, especially those in the field of nursing, who can use their power of influence to promote the change of habits and stigmas that are disseminated by the lack of information, providing better understanding and greater knowledge. About what the disease is, its functioning and the necessary care to maintain the health of SLE patients.

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