

Systematization of Nursing Care for patients with Dimorfa leprosy undergoing treatment for type 2 disability

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Abstract— Objective: to report the experience of applying Nursing Care Systematization to users with Dimorphic Leprosy in reaction treatment for type 2 disability. Method: This is a descriptive study, like an experience report. The NCS was applied to the user during the nursing consultation to continue to control the Hans de Mal program and n in

a Family Health Strategy, located in the Administrative District of Bengui in the city of Belem - PA ; in order to construct the present report, it took five moments . Results: In order to build this report, it took five moments: in the first moment, the ACS responsible for the micro area in which he resides was aware of the patient's history; then, the consultation at the clinic ; the second moment, the problems encountered during the consultation were listed ; in the third moment, the adequate elaboration of the affected Basic Human Needs ; In the fourth moment, the Nursing Diagnoses based on the North American Nursing Diagnosis International and the International Classification of Nursing Practices in Public Health were applied ; In the fifth moment, the expected results were drawn and Finally, in the sixth moment, the nursing interventions and prescriptions were scored . Then a care plan comprising 10 interventional plans. Conclusion: The importance of nursing care for the contribution to the quality of life of the patient, family and community is emphasized, even in difficult moments as in the present study, thus demonstrating the importance of these services at all levels of care.

Keywords— Nursing Care, Nursing, Leprosy, Wounds and Injuries, Health.

I. INTRODUCTION

The report for Assistance of Nursing (NCS) used by nursing professionals as a tool, regulated in Brazil, to give organization to work and check quality and the management of care provided as well as allow better planning of the assistance to be develop lives [1], [2].

In this sense, the nurse faces a complex process to structure and implement their managerial and care practice, considering that carrying out the nursing process in order to promote, maintain or recover the patient's health is influenced by the organization, which is a very difficult administrative action, due to the innumerable ways to carry out these commands, in addition to challenging the fragility of a line of care fragmented by the various professionals who promote health care [3].

In that way, nursing services are configured as an important action to be developed for the prevention, control and treatment of leprosy. Furthermore, the NCS is of fundamental importance for the elimination of the disease as it provides enough autonomy to the professional nurse foster care actions with a view to ensure comprehensive care with a view to remedial measures [4].

The use of NCS to improve care and overcome difficulties in the various health institutions is a concern the scope of the nurse, it is a management methodology that enables service quality, based on a systematic care, despite the difficulties that contribute to full application of this practice in the care process; working using the NCS benefits the assistance to the patients with leprosy, as it favors the application of nursing care and enables the best possible ways to assist the patient [5].

NCS was performed during a follow-up consultation in the Hansen's disease program (MH) of the Ministry of Health to the patient living with Dimorfa Hansen's disease (HD) with Multibacillary classification and in type 2 reaction treatment, by the nurse, obeying the steps of SAE,

which includes the collection of history and anamnesis, survey of Nursing diagnoses, establishment of expected results, Nursing intervention, prescription and evaluation of results [6].

The North American Nursing Diagnosis Association International (NANDA-I) and the International Classification of Nursing Practices in Collective Health (ICNPCH) were used to perform the Nursing Diagnoses (ND). Considering that both have the same perspective of achieving the expected results, aiming at the complete improvement of the client, both were used as complementary [7].

Leprosy is a pathology that involves biopsy, economic and social aspects, which directly impact on the development of the disease. Otherwise, leprosy is a chronic, granulomatous, infectious disease caused by the bacterium *Mycobacterium leprae*, also known as Hansen's bacillus. characteristic of being mandatory intracellular, showing a peculiarity of predilection for skin cells and peripheral nerve cells [8].

When not diagnosed and treated early and appropriately, the disease progresses to physical disability and deformities, which leads to decreased ability to work, restriction of social life and psychological problems. The degree of disability is determined from the neurological evaluation of the eyes, hands, feet and its result is expressed in values ranging from 0 (zero) to II (two). So, grade 0 is determined when there is no disability in the eyes, hands and feet; grade 1 when there is disability (decrease or loss of sensation in the eyes, hands or feet) and grade 2 when there is disability and deformity in the eyes, hands and feet [9].

Justified the choice of this theme due to the endemic distribution the disease in Brazil and the difficulty faced by professionals of health services to detect early mind new cases, demonstrating one weakness in the care line,

with delayed treatment and presence of disabilities physical problems, deficiency in the prevention of infection of the contact persons and ignorance of the population about the disease [10].

So, the aim of this study is to report the experience of applying the Nursing Care Systematization (NCS) to users with Dimorfa Hansen's disease in reaction treatment for type 2 disability.

II. MATERIALS AND METHODS

This is a descriptive study, like an experience report. The sample selection followed the non-probabilistic criterion, where the participant was included in the study for convenience. NCS was applied to the user with Hansen's disease Dimorfa with Multibacillary classification and undergoing reaction treatment for type 2 disability, experienced during the nursing consultation to continue the control of the MH program in a Family Health Strategy (FHS), located in the District Administrative Department of Bengui (DABEN) in the city of Belem -PA.

NCS was applied by the nurse of that ESF, with the assistance of nursing students from the 9th period who were experiencing the supervised internship in Primary Care of a Private Higher Education Institution located in Belem-PA. The consultation took place on 8/3/2020, shortly after receiving information from Community Health Agents (CHA) about the patient's complaints.

To build the present report, it took five moments: in the first moment, the CHA responsible for the micro area in which he resides was informed of the patient's history; then, the consultation at the outpatient clinic was structured and planned to receive and carry out the appropriate management of patients with Tuberculosis and Leprosy, in which the nurse, together with the students, was able to prepare the Nursing History (NH). In the second moment, the problems encountered during the consultation and listed for the NCS were listed, with a view to resolving the patient's complaints.

In the third moment, the adequate elaboration of the affected Basic Human Needs (BHN) was carried out, in a systematic way to provide a better handling of the patient's complaints, as well as working through an organized care line. Furthermore, there is a picture of BHN divided into physiological, security, love / relationship, esteem and personal fulfillment.

In the fourth moment, the Nursing Diagnoses (ND) based on the NANDA-I and ICNPCH were applied. In the fifth step, the expected results were drawn according to the demand for each problem encountered during the

consultation. Finally, in the sixth moment, the pertinent Nursing interventions and prescriptions were scored.

III. RESULTS

It is reported that during the nursing consultation, user data collection was carried out in a comprehensive manner, to provide students with learning and demonstrate interest and respect for the client. Then, the Nursing history is reported: "User, 54 years old, male, attended the EC to continue the control of the MH Program. At the moment, he complains of arthralgia, asthenia and pain in the Lower Limbs (lower limbs). Resides in own masonry house with 04 rooms and a bathroom.

Divorced, he reports being abandoned by his ex-partner when he received the MH Diagnosis; he currently has his son with him; reports having running water and garbage collection weekly. Family income for the benefit of a minimum wage, claims that he worked as a bricklayer in a construction company and left to perform the treatment of rheumatoid arthritis and that was when he was diagnosed with MH, being referred to the Reference Unit Marcelo Candido, located in the municipality of Marituba-Para, where he began treatment for MH on 04/09/2018 with an end date on 11/12/2019.

Morbid family history: Refers to the mother and three siblings with rheumatoid arthritis. Life Habits and Personal Morbid Antecedents: He reports having been an alcoholic for 6 years, had drunk alcohol for about 19 years and smoked for about 10 years. does not perform physical and / or occupational activities for fear of falling, as he reports having bone fragility and three fractures in the lumbar spine due to this condition. He reports allergies to some foods and red meat, under the accusation that purulent and foul-smelling bubbles appear after eating these foods and, she believes that it is due to the medication she is using (Thalidomide and Prednisone) and allergy to Benzetacil.

Food Standard: refers to having 05 meals a day and accepts all types of food well, with little intake of frying, fat and sugars. Good water intake, several times a day. Impaired sleep and rest pattern, as it complains of loss of sleep and that it is not sleepy.

Currently, he continually uses the medication Thalidomide (100mg), two pills at night, Prednisone (60mg) when he has a reaction crisis and informs that the doctor makes progressive weaning, as his symptoms improve. He reports using the vitamin on his own, as he has already fainted due to moments of asthenia and hypotension. He was diagnosed with MH with clinical classification Dimorfa, through the clinical examination, in the chart of counter reference issued in the URE, on

03/12/2018, presenting five lesions, presence of spots, nodules and infiltrations in the skin.

The therapeutic regimen listed by the physician was Adult Polychemotherapy / Multibacillary (MDT / MB), with the number of doses administered in the ERU: 01 unit on 03/12/2018. The leprosy reaction diagnosed was TYPE I with a scheme to control the reaction (neuritis) with Prednisone with an initial dose of 40mg. Complementary diagnostic tests were performed: Lymph BK examination performed in 2018: Bacilloscopic Index: 3.5, Morphological Index: 6%; Bacilloscopy examination of the intradermal shaving for Leprosy performed in January 2019: Right ear lobe: 4+, Ear lobe left: 4+, right elbow: 4+, Injury: 4+, Bacilloscopic Index: 4.00, Morphological Index: 0% and Classification of the degree of disability using the simplified neurological assessment form, carried out on 03/16 / 2018, by the nurse of that ESF, as Grade I.

Physiological patterns of elimination: Inform present and spontaneous diuresis, but with difficulty in evacuation.

On physical examination: general appearance in a regular, oriented physical state, dry, dehydrated skin, presence of skintears in the hands, numerous and small subcutaneous inflammatory nodules in the upper limbs (upper limbs), chest and lower limbs (lower limbs). Presence of scars due to the appearance of purulent and foul-smelling blisters on the chest, abdomen and lower limbs. Mucous membranes, dried and pale, infiltration in the face, in the eyebrow region, alopecia in eyebrows; photoreagent pupils, presence of senile halo, eyelid muscle strength and corneal sensitivity preserved. Nasal fossae with alopecia and septum perforation. Oral cavity without significant changes. Symmetrical chest, refers to pain on deep palpation in the region of the nipples bilaterally. Cardiac auscultation: Normophonetic heart sounds in 2 times present without murmur. Pulmonary auscultation: vesicular murmurs present, without changes. Abdomen: flat, tympanic, massive, hydro-aerial noises present and hypophonic. MMSS: decreased strength in the fingers, decreased sensitivity to 2g monofilament (lilac). LL: bilateral edema (locker ++ / +++), nails with onychorrhexis and yellowish color. Presence of an erythematous plaque, with fading external edges and internally well-defined with a hypopigmented oval center with a fovea aspect in the Right Lower Limb in the internal fibular region.

Nursing conduct: reinforcement of the guidelines regarding hydration and lubrication of dry parts, exercises to increase muscle strength, use of appropriate shoes, care when walking and use of sunscreen. Reinforced as to the

importance of returning consultations, asked if there was any doubt in what was passed on for clarification and given relevant guidance to what had been identified.

IV. DISCUSSION

For each Nursing problem (NP), a Nursing Diagnosis (ND) was applied, classifying the Affected Standard (AS) and the NHB, as well as its assistance plan with Expected Outcome (NP) and the Nursing Interventions (IE) reporting the client's clinical status, then we have the following assistance plan.

1st EP: Septum perforation; PA: Mucous Cutaneous Integrity; NHB: Security; DE: Skin lesions in patients with MH (ICNPCH); RE: User will not present other lesions on mucous membranes, as well as improvement in the present lesion; IE: To advise on the hydration and cleaning of the area; ask questions about the situation.

2nd EP: Fear related to illness; PA: Perception; NHB: Security; DE: Fear (NANDA-I); RE: Wish the client to break this barrier by clarifying the disease.

3rd EP: Sleep and rest impaired; PA: Sleep pattern; NHB: physiological; DE: Sleep pattern disorder (NANDA-I) related to health status characterized by the user's report; ER: it is estimated that the patient will recover the sleep pattern in four days; IE: guide the importance of preserving sleep and rest for health.

4th EP: difficulties to evacuate; PA: Elimination pattern; NHB: physiological; DE: Constipation (ICNPCH); RE: will show improvement in comfort by 03. IE: Encourage increased water intake, stimulate fiber intake in the diet; encourage walks and advise on the possible reactions of the treatment performed.

5th EP: Pain; PA: Perception; NHB: Physiological; DE: Acute pain (NANDA-I) related to health status, characterized by the user's verbal report. RE: Will improve pain perception in up to 03 days. IE: advise on comfort massage; guide how much care with feet and hands to decrease pain; forward the ERU; forward for consultation with the doctor.

6th EP: Intolerance to activity; PA: Activity / rest; NHB: Security; DE: Impaired walking (NANDA-I) related to fear of falling, characterized by the user's verbal report. User will be available for activities and / or walking within two weeks. refer to the specialized reference service, guide how much risk of falling; refer to physiotherapy; refer to the psychologist.

7 ° EP: Dry and dehydrated skin; PA: Activity / Rest; NHB: Physiological; DE: Risk of impaired skin integrity (NANDA-I) related to drug treatment. RE: User

will not present skin lesions, as well as improve hydration and dryness of the dermis within two weeks. IE: guide how much skin care; encourage water intake, advise on the use of sunscreen and hydration cream.

8th EP: Edema in lower limbs; PA: Activity / Rest; NHB: Physiological; DE: Ineffective peripheral tissue perfusion (NANDA-I) related to the current health status, characterized by a locker test ++ / +++ . RE: User will show edema reduction for up to one week. IE: advise on comfort massage; encourage water intake; guide comfort position for lower limbs; request laboratory tests to prevent circulatory changes.

9th EP: Decreased sensitivity; PA: Perception; NHB: Physiological; DE: Impaired peripheral sensitivity (ICNPCH); RE: User will not have burns, falls and cuts during the period being monitored in the MH program; IE: advise on the use of light and appropriate clothing; guide how to massage the feet and hands; guide how much skin care; advise on how to care for injuries in daily tasks advise on the risk of accidents.

10th EP: Abandonment; PA: Coping / Stress; NHB: love / relationship DE: risk of impaired resilience / disable family coping (NANDA-I) related to ineffective coping with the disease, characterized by verbal reporting. RE: User will have an improved disposition for family coping, as well as no resilience loss in coping with the disease; IE: Welcome the user; encourage going to support groups; refer to the psychologist; forward the case to social service.

V. CONCLUSION

It was possible to identify, when carrying out the consultation, factors indispensable for the maintenance of the community's health, facilitating the understanding of factors of prevention, promotion and recovery of diseases. It is also inferred that the use of therapeutic listening, the establishment of an interpersonal relationship between the patient and the professional and an integral look at the subject enable full knowledge of the patient's history and the development of an ideal care plan that allows the patient enter into a resolute, comprehensive care line that generates customer satisfaction through the quality of Nursing Care.

It is also emphasized the importance of nursing care for the contribution to the quality of life of the patient, family and community, even in difficult moments as in the present study, thus demonstrating the importance of these services at all levels of care.

The main limitation of this study was the opportunity to accompany the patient in a single consultation, without

the academics knowing, thus, if the NCS idealized by them met the patient's demands.

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