

## PERFIL DIAGNÓSTICO DE ENFERMAGEM PARA PESSOAS COM LEISHMANIOSE

### PROFILE DIAGNOSIS OF NURSING FOR PEOPLE WITH LEISHMANIOSE

### DIAGNÓSTICO PERFIL DE ENFERMERÍA PARA PERSONAS CON LEISHMANIOSE

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#### RESUMO

**Objetivo:** identificar o perfil diagnóstico de enfermagem para pessoas com Leishmaniose visceral em uma unidade de infectologia. **Métodos:** estudo transversal, descritivo, com abordagem quantitativa, realizado em 36 pessoas com Leishmaniose Visceral que estavam presentes na unidade de infectologia de um Hospital Universitário, no Nordeste do Brasil. Para a coleta de dados, adotou-se um roteiro de anamnese e exame físico. Os diagnósticos foram construídos processualmente utilizando a CIPE versão 2015. **Resultados:** foram identificados 57 focos da prática de enfermagem e elaborados 35 enunciados, validando-se 13 afirmativas de diagnósticos, sendo estes: frequência cardíaca aumentada, eliminação intestinal excessiva, tremor, medo, defecação comprometida, estado de consciência alterado, aceitação do regime terapêutico prejudicado, hipertermia, socialização, exposição à contaminação, sangramento, insônia e o uso de drogas. **Conclusão:** por fim, nota-se que o perfil diagnóstico direciona as intervenções prioritárias a pessoas com LV.

**Descritores:** Processos de enfermagem; Cuidados de enfermagem; Doenças transmissíveis; Leishmaniose visceral.

#### ABSTRACT

**Objective:** To identify the profile nursing diagnosis for people with visceral leishmaniasis and infectious diseases unit. **Methods:** Cross-sectional, descriptive study with a quantitative approach, performed with 36 people with Visceral Leishmaniasis who were present in the infectious diseases unit of a university hospital in northeastern Brazil. For data collection adopted a script history and physical examination. Diagnoses were built procedurally using CIPE version 2015. **Results:** We identified 57 nursing practice focuses, and prepared 35 statements, if validating 13 affirmative diagnostics, namely: increased heart rate, excessive bowel movements, tremor, fear, committed defecation, altered state of consciousness, acceptance of impaired therapeutic regimen, hyperthermia, socialization, exposure to infection, bleeding, insomnia and the use of drogas. **Conclusion:** finally, note that the diagnostic profile directs the priority interventions will people LV.

**Descriptors:** Nursing process; Nursing care; Communicable diseases; Leishmaniasis visceral.

#### RESUMEN

**Objetivo:** Identificar los diagnósticos de enfermería perfil de las personas con leishmaniasis visceral y la unidad de enfermedades infecciosas. **Métodos:** transversal, descriptivo, con abordaje cuantitativo, realizado con 36 personas con leishmaniasis visceral que estaban presentes en la unidad de enfermedades infecciosas de un hospital universitario en el noreste de Brasil. Para la recolección de datos adoptado una historia de la escritura y la exploración física. Los diagnósticos fueron construidos usando procesalmente CIPE versión de 2015. **Resultados:** Se identificaron 57 la práctica de enfermería se centra, y se prepararon 35 estados, si la validación de 13 diagnósticos afirmativas, a saber: aumento del ritmo cardíaco, movimientos excesivos del intestino, temblor, miedo, defecación comprometida, estado alterado de conciencia, de aceptación del sistema alteración de la hipertermia terapéutica, la socialización, la exposición a la infección, hemorragia, el insomnio y el consumo de drogas. **Conclusión:** Por último, cabe destacar que el perfil de diagnóstico dirige las intervenciones prioritarias las personas con LV.

**Descritores:** Procesos de enfermería; Atención de enfermería; Enfermedades transmisibles; Leishmaniasis visceral.

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## INTRODUCTION

Visceral leishmaniasis (VL) is one of the leading systematic, neglected and fatal tropical diseases, comprising an annual incidence rate of 202,000 - 389,000 registered cases and about 20,000 - 40,000 deaths worldwide<sup>(1)</sup>.

Currently, VL is endemic in 62 countries, with an estimated 200 million people at risk of acquiring the infection. The highest rates of cases occur in countries such as India, Bangladesh, Nepal, Sudan and Brazil, corresponding to a rate of 90%<sup>(1-2)</sup>. In Brazil, VL has a higher incidence in rural areas, because, among the 27 states, the average in the last five years was 3,500 new cases<sup>(3)</sup>.

The disease symptomatology characterizes by long-term fever, weight loss, asthenia, adynamia and anemia. Thus, the care provided by health professionals in the multiprofessional scope requires skills and competences based on scientific evidence and the use of light, light-hard or hard technologies<sup>(4)</sup>.

Therefore, the Nursing Care Process, carried out by a team supervised by the nurse, must implement actions and systematic interventions directed to the patient's priority needs and optimizing time that reflects on the quality of life of the person with VL<sup>(11)</sup>. Thus, the Nursing Care Systematization (NCS) is a method used by the nurse that provides gains and challenges, since it requires the professional to practice the critical thinking and use clinical, diagnostic and therapeutic reasoning. Among the several ways to implement the NCS, one can use the decision models, Nursing Process (NP), care plan, among others<sup>(6)</sup>.

The NP is a method characterized by its practicality, optimization, with scientific relevance, which consists of interrelated, interdependent and recurrent phases, such as history, diagnosis, interventions and implementation<sup>(7)</sup>.

Noting the need to complement the process, the International Council of Nurses (ICN) elaborates the International Classification for Nursing Practice - ICNP®, considered a unifying system of nursing language, which allows designing trends on the needs of patients, the provision of treatments, as well as the use of resources and results of nursing care<sup>(8)</sup>.

Therefore, the study's justification is to identify the priority needs of people with VL in order to elaborate a care based on the precepts of scientific evidence and to implement nursing

actions and interventions in a systematic, welcoming and humanized way.

In this sense, the following question has emerged: Can nursing diagnoses for VL patients be developed from the practice focus? Thus, the study aimed to identify the nursing diagnosis profile for people with visceral leishmaniasis at a unit of infectious diseases.

## METHOD

This is a cross-sectional, descriptive study, with a quantitative approach, carried out at the unit of infectious diseases of a University Hospital in the Northeast of Brazil. The study population consisted of all subjects that were present at the time of collection. The sample calculation based on the arithmetic mean of services of the unit for people with leishmaniasis between 2010 and 2014, which was 126 per year. The used formula was for finite populations, taking into account the 95% confidence level and the population size (N=126)<sup>(9)</sup>.

The selection of the 36 people with VL was by convenience of consecutive form, adopting the following inclusion criteria: clinical diagnosis of visceral leishmaniasis, being at least 18 years old, being hospitalized at the time of data collection. The following exclusion criteria were used: unknowing the disease diagnosis and not being in psychic and emotional conditions.

In order to verify the psychic condition of patients with Leishmaniasis, the researchers previously referred to the medical record to analyze the history of the disease and its evolution. They, then, reported to the nursing team for additional information about the patient's behavior, his/her orientation regarding space and time.

The data were collected from February to October 2014, by means of an anamnesis and physical examination that contemplated sociodemographic, clinical and behavioral aspects<sup>(10)</sup>. The present instrument was submitted to the validation of content and appearance by ten professors who develop studies in the NCS area; subsequently, the proposed suggestions were included in the instrument.

Then, a theoretical and practical training was done to standardize the data collection with two students of Scientific Initiation and three post-graduation students at Master level with hour workload of 12 hours per week, developed through expositive and dialogic classes and

discussions of clinical cases with an emphasis on approach to patients with Leishmaniasis.

After the theoretical stage of the course, there was a practical activity of simulation of physical examination in pairs in order to train the researchers and standardize the data collection. Thus, after this step, the instrument was applied as a pre-test in 10% of the sample.

The elaboration of the diagnoses was procedural, performed simultaneously with the data collection, seeking to identify the foci of the nursing practice in order to construct the diagnostic statements. Thus, ICNP<sup>®</sup> version 2015 was used, which is an information system with the objective of complementing in the elaboration of the diagnosis. According to the International Council of Nursing (ICN), to elaborate a nursing diagnosis, nurses should use a focus and judgment term<sup>(11)</sup>.

After the construction, the nursing diagnosis statements were submitted to a content validation process. Thus, a spreadsheet was developed in Microsoft Excel version 2009 with the respective nursing diagnoses statements for patients with Leishmaniasis.

Thus, one asked the collaboration of three assistance nurse and nursing professors who worked at the clinic. Those professionals were included in the validation, considering their experience and specialty in the clinic. Their task was to assess whether the proposed statements were applicable to patients with leishmaniasis. In case of disagreement of the affirmations, suggestions should be presented for their adequacy to the reality of nursing practice.

The data were processed using the descriptive statistics that elaborated the database using Microsoft Excel 2009, whose results were presented descriptively in the form of tables by means of frequency distribution (f) and percentage (%). The Kappa index, analyzed by the Statistical Package for the Social Science (SPSS), version 22.0, was then chosen to analyze the degree of agreement between the researcher and the specialists. The Kappa index was defined as an association measure to describe and test the degree of agreement, that is, reliability and accuracy of an evaluation. Kappa values  $\geq 0.80$  are considered as a good level of agreement. For purposes of validation of the Nursing diagnoses, only those with a substantial agreement of 0.61 to 0.80 and excellent above 0.80 were considered.

Thus, the study met the ethical precepts of researches involving human beings according to national and international standards with favorable opinion of the Research Ethics Committee of the University Hospital, Brazil, opinion No. 510.708. Prior to data collection, the participants of the study were clarified about the objective of the research, and Informed Consent Form (ICF) was read.

## RESULTS AND DISCUSSION

Thirty-six people with Visceral Leishmaniasis, with a minimum age of 35 years old and a maximum of 45 years old (67,75%) participated in the study, Most of them were women (57,78%), married (63,85%), autonomous (41,33%), Caucasian (54,21%) and Catholic (85,74%). In this sense, 57 focuses of the nursing practice were identified and 35 statements were elaborated, validating 13 diagnostic statements.

Table 1 - Distribution of Nursing Diagnoses for People with Leishmaniasis, Paraíba, PB, Brazil (2014).

Diagnóstico de Enfermagem	IC > 0,80	f(%)
Excessive intestinal elimination	1,0	89
Committed defecation	0,80	88
Increased heart rate	1,0	84
Tremor	1,0	81
Hyperthermia	1,0	75
Bleeding	0,90	71
Altered consciousness state	0,90	70
Fear	1,0	69
Insomnia	0,82	63
Impaired therapeutic regimen acceptance	0,80	61
Use of drugs	0,80	60
Socialization	0,90	59
Exposure to contamination	0,80	58

Source: Survey data, 2014. Note: IC - Concordance Index.

The care given to people with visceral leishmaniasis (VL) requires nurses to have the ability and competence to identify priority needs. The diagnostic profile emerges as a tool that aims to direct the care goals of people with leishmaniasis through nursing interventions<sup>(12)</sup>.

Thus, in this study, since there was a large number of nursing diagnoses, the priorities were affirmatives that presented a concordance index greater than or equal to 1,0, being: increased heart rate, excessive intestinal elimination, tremor, fear and hyperthermia.

The diagnosis of excessive intestinal elimination was conceptualized from the increase in the number of evacuations performed per day and with an aqueous appearance<sup>(11)</sup>. In patients with Leishmaniasis, the cause of the disease is linked to the etiologic agent of the disease and to the therapy involved. The drugs used in the treatment have, as an adverse effect, instability of oncotic and hydrostatic pressure in the intestinal lumen, leading to diarrhea<sup>(13)</sup>.

In view of this scenario, the nurse must implement interventions that attenuate or improve the physiological conditions of the patient, such as: measurement of Body Mass Index (BMI), request for nutritional assessment, guidance on healthy eating habits, nasogastric tube passage in cases of need, specific care with the probes (identification of the functionality, control in the time of permanence and hygiene), evaluation of the supplementation in the feeding of the patient along with the nutrition service, oral/venous hydration, water balance and monitoring of the hydroelectrolytic state<sup>(13)</sup>.

The diagnosis of an increased heart rate characterizes by increased systolic volume<sup>(11)</sup>. The cause for developing the condition is not well understood, however, the nurse must be aware of that need, since the condition directly affects the other systems of the organism, increasing the risk of cardiovascular diseases<sup>(13)</sup>.

Among the various forms of nursing surveillance and intervention, priority actions include cardiac auscultation as needed, vital signs measurement, medication administration, cardiac monitoring and care related to feeding with high levels of sodium<sup>(13)</sup>.

Another manifestation observed in people with VL was the development of tremor and hyperthermia. According to ICNP<sup>®</sup> version 2015, tremor is characterized as involuntary muscular

contractions alternating with muscle relaxation<sup>(11)</sup>. That manifestation is evidenced by the considerable increase in the level of toxins released by the etiologic agent<sup>(14)</sup>.

However, the tremor can put the patient at risk, making him/her susceptible to falls, and, if there is muscular protein loss, many may become restricted to the bed, thus developing secondary diseases, for example pressure ulcer<sup>(15-12)</sup>.

Regarding the diagnosis of hyperthermia, it is characterized by a decrease in the ability to regulate the internal thermostat, since the etiologic agent affects the hepatocytes, damaging the cells and releasing thermotoxins<sup>(11)</sup>. In order to try to reduce the recurrence of the condition, the nurse must perform interventions, such as scheduling and administering the medications, making compresses in large circulation areas, prescribing a position change, and advising on the use of light clothing<sup>(16-17)</sup>.

Fear was another frequent diagnosis in people with VL. Such feeling is referred to an anxiety related to the emotion arising from a real cause and associated with the danger, having a defense function, because it generates a reaction in the organism to the imminent danger<sup>(11)</sup>. In addition, fear triggers physiological reactions to escape from challenging situations; thus, the presented feeling directly influences the acceptance of the diagnosis, delaying the initiation of drug treatment<sup>(17)</sup>.

Thus, the nurse must provide educational assistance in order to guide and clarify the care involved in the therapy, as well as to provide individual and collective support; offer comfort to the patient; guide and promote activities in family groups; and to establish a bond of family support in order to obtain effective and qualified assistance<sup>(15-17)</sup>.

## CONCLUSION

After analyzing the data, the nursing diagnosis profile was drawn up for people with leishmaniasis composed by 57 centers of nursing practice, 35 statements, validating 13 diagnostic statements.

The study presented various limitations, such as the geographical limitation, since it occurred in a single state of the Northeast region. Nevertheless, the scientific evidence provided by this study may encourage further researches to

complement and diffuse the applicability of ICNP in the field of infectious diseases.

Thus, one expects that the scientific evidence provided by the study will allow an improvement to both nurses in clinical practice as in the fields of research, extension, teaching and management.

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