Research Article

Nursing activities in the prevention of american tegumentary leishmaniosis in the vicência/pe municipality

Abstract

Introduction: American tegumentary leishmaniasis (ACL) is defined as a zoosnosis, of dermatological, non-contagious infections caused by the protozoan of the genus *Leishmania*, where its transmission is vector covering skin and mucosa; affecting other animals, to which man may be involved secondarily. It often occurs more in males than in adults, although there has recently been a greater involvement of children of both sexes.

Objective: To identify how nurses have been involved in the prevention of American cutaneous leishmaniasis in the municipality of Vicência / PE.

Method: This is a quantitative research of an exploratory nature for the analysis of nursing performance in the prevention of American cutaneous leishmaniasis in the municipality of Vicência / PE. The universe of this research was composed of 64 people from the city of Vicência / PE, infected and exposed to the protozoan of the genus leishmania, in the last 10 years, being the municipality chosen by the infection rates for American tegumentary leishmaniasis, according to the Municipal Health Department of Vicência / PE.

Results: The present study evidenced that 68.8% to 87.5% do not conduct orientation campaigns; 87.5% do not perform Nursing consultations; and 92.1% do not perform a home view.

Conclusion: The study was able to identify how nursing practice has developed in the prevention of American cutaneous leishmaniasis in the municipality of Vicência / PE, based on lectures, campaigns, nursing visits, home visits, leaflet distribution, school and health, which makes one think that the same is lacking in most of these actions, due to the lack of management strategies, organization, planning, control and stimulation of activities in the attempt to achieve goals.

Keywords: cutaneous leishmaniasis, nursing, epidemiological monitoring, campaigns, nursing visits, home visits, leaflet distribution, school and health, diseases, phlebotominae, epidemiological, cutaneous leishmaniasis

Introduction

American Cutaneous Leishmaniasis (ACL) occurs in the Americas, from the southern United States to northern Argentina, and the incidence of this disease is increasing in Latin America, especially in Brazil. According to the Health Ministry (2010), it can be defined as an infectious, non-contagious disease caused by the protozoan of the genus *Leishmania* of vector transmission affecting the skin and mucosa of the individual. Thus, it is primarily a zoonotic infection, which affects other animals, other than man, which can be involved secondarily. The cycle of infection is defined by lesions exclusively on the skin, beginning at the point of inoculation of infective promastigotas through the bite of the vector, any of the species *leishmania* causing the disease. The primary lesion is usually unique, although occasional multiple stings of phlebotominae or local dissemination may generate a large number of lesions, which arise after a variable incubation period (from 10 days to three months), such as a progressing erythematous papule slowly to nodule, which with evolution, the notable polymorphism in lesions is highlighted. In relation to infection caused by American tegumentary leishmaniasis, the skin tissue and mucous membranes are most commonly affected, the most common manifestations of leishmaniasis ulcer: skin ulcer or in small numbers, with raised edges on frame and with no pain local. That other morphological aspects can be identified, such as: [...] infiltrated plaque, tuber, nodules and verrucous vegetative lesion, when the mucosa is damaged, may present erythematous-infiltrated, granular ulcerated appearance. In order of frequency, mucosal lesions are manifested mainly in the nose, hard palate, pharynx and larynx.

From the epidemiological point of view, between 1999 and 2008, 269,122 cases of LTA were recorded, with an annual average of 26,912 cases in the State of Pernambuco. Thus, in the state, the disease occurs predominantly in male adults, although recently, it is perceived a greater commitment of children of both sexes. In this sense, in the city of Vicência / PE, from 2010 to 2013, 84 new cases of this pathology were notified. Regarding LTA control, it should be carried out comprehensively under the epidemiological surveillance aspects, through measures that aim to interfere in the transmission chain, as well as educational and administrative measures. In this way, epidemiological surveillance should cover from the detection of the...
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The main objectives of this research were: to identify how the nurse’s role in the prevention of American cutaneous leishmaniasis. Thus, it is a study that was carried out in Vicência-PE in the period from January 2012 to November 2014. According to the results, it can be seen that 68.8% do not conduct lecture-type educational activities; 67.1% do not conduct health education campaigns for the prevention or identification of risk factors; 87.5% do not perform nursing consultations related to the focus of prevention of American cutaneous leishmaniasis; and 92% do not carry out the intervention in the home visit. Table 3 shows the prevalence of the disease and the risk factors in the study area.

Methodology

It is a predominantly quantitative study which has the natural environment as a direct source of data, and the researcher as a fundamental instrument, within a deductive approach to data analysis and giving greater importance to the meanings attributed by people to things and to life. In this way, it is a study that was carried out in an area where there is little structured knowledge about this subject, which can provide the exploration of the reality, studied, in search of a greater knowledge in order to better describe the phenomenon studied. The universe of this research was composed of 64 people from the city of Vicência / PE, infected and exposed to the protozoan of the genus leishmania, in the last 10 years, being the municipality chosen by the infection rates for American tegumentary leishmaniasis, according to the Municipal Health Department of Vicência/PE. A structured questionnaire was used, containing closed questions that were answered, in order to clarify the researched problem. The inclusion criteria used were: people who carry the disease or know someone with this pathology; who are over 18 years of age; resides in the municipality of Vicência / PE; voluntarily participate in the research, signing the Free and Informed Consent Form (TCLE). The exclusion criteria were: people who do not carry the disease or do not know someone with this pathology; who are not over 18 years of age; who do not reside in the municipality of Vicência / PE; do not voluntarily participate in the research, not signing the TCLE. With questionnaire application, the risks were usually minimal (or possible constraints for exposing particular points of view, without physical risks). This research is of great importance to evaluate the nursing and authorities’ actions, as well as the knowledge of the population about the risks of infection by the American tegumentary leishmaniasis protozoan in the municipality of Vicência / PE, creating strategies for prevention and health promotion. The data were collected individually, from the application of questionnaire and EHIC, after approval of the Ethics and Research Committee (CEP) 819.450, under the number of CAAE: 33894814.3.0000.5289 and after answering the questionnaires were sealed in envelopes individual and delivered to the statistician to perform statistical analysis, using the softwares Statistical Package for the Social Sciences (SPSS) and Microsoft Excel, in order to deform graphs/tables for presentation the variables and data analyzed.

Results

Table 1 presents the social profile of carriers and noncarriers of American cutaneous leishmaniasis in the municipality of Vicenza-PE, between October and November 2014. Regarding the variables, it was found that 84.38% of the interviewees were female; 39.1% are between 18 and 28 years of age, 34.3% between 40 and 59 years of age, and most of them reside in João Ramos Maranhão Lot 31.2% and Enbuho Imbu 26.5%. Table 2 shows the performance of nursing in the prevention of cutaneous leishmaniasis in the Family Health Units in Vicenza-PE municipality, between October and November 2014. According to the results, it can be seen that 68.8% do not conduct lecture-type educational activities; 67.1% do not conduct health education campaigns for the prevention or identification of risk factors; 87.5% do not perform nursing consultations related to the focus of prevention of American cutaneous leishmaniasis; and 92% do not carry out the intervention in the home visit. Table 3 deals with the knowledge of the population about projects developed by Vicência / PE municipality between October and November 2014. Analyzing the results of Table 4, it can be seen that nursing does not adopt preventive measures to combat leishmaniasis infection, where it can be seen that the guidelines at the primary health care (73.5%), leaflet distribution (93.8%) and guidance in schools (89.0%) are not carried out. Figure 1 shows the American cutaneous leishmaniasis infection indices in the municipality of Vicenza-PE in the period from January 2004 to November 2014. In view of the results it is noticed that the number of men infected 61.5% exceeds women 38.5%. Figure 2 shows the infection rates of cutaneous leishmaniasis in the municipality of Vicenza-PE in the period from January 2012 to November 2014. According to the results, male respondents accounted for the highest percentage of cases recorded in the evaluation period of the present study, 68.1%, where women presented 3.9%.

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Table 1 Social profile of the carriers and non-carriers of American cutaneous leishmaniasis in the municipality of Vicência-PE, Oct and Nov / 2014

| Variables               | n. 64 | %    |
|-------------------------|-------|------|
| Gender                  |       |      |
| Male                    | 10    | 15,7 |
| Female                  | 54    | 84,3 |
| Age                     |       |      |
| 18-28 years             | 25    | 39,1 |
| 29-39 years             | 09    | 14,1 |
| 40-59 years             | 22    | 34,3 |
| 60-79 years             | 07    | 11,0 |
| 80-89 years             | 01    | 1,5  |
| Place of Residence      |       |      |
| Comunidade Mãe Rainha   | 14    | 22,0 |
| Engenho Imbu            | 17    | 26,5 |
| Engenho Usina Barra     | 09    | 14,1 |
| Loteamento João Ramos Maranhão | 20 | 31,2 |
| Comunidade Quilombola Trigueiros | 04 | 6,2 |

Table 2 Nursing performance in the prevention of American tegumentary leishmaniasis in the Family Health Units in the Municipality of Vicência-PE, Oct and Nov / 2014

| Variables               | n. 64 | %    |
|-------------------------|-------|------|
| Lecture                 |       |      |
| Perform                 | 20    | 31,2 |
| Do not perform          | 44    | 68,8 |
| Campaigns               |       |      |
| Perform                 | 21    | 32,9 |
| Do not perform          | 43    | 67,1 |
| Nursing consultation    |       |      |
| Perform                 | 08    | 12,5 |
| Do not perform          | 56    | 87,5 |
| Home visit              |       |      |
| Perform                 | 05    | 7,9  |
| Do not perform          | 59    | 92,1 |

Table 3 Knowledge of the population about projects developed by the municipality in the fight against leishmaniasis in the city of Vicência-PE, Oct and Nov / 2014

| Variables               | n. 64 | %    |
|-------------------------|-------|------|
| They know               | 07    | 11,0 |
| Do not know             | 57    | 89,0 |

Table 4 Indicates preventive measures adopted by nursing in the case of infection by American tegumentary leishmaniasis in the municipality of Vicência-PE, in the period of Oct and Nov / 2014

| Variables               | n. 64 | %    |
|-------------------------|-------|------|
| Leaflet distribution    |       |      |
| Perform                 | 04    | 6,2  |
| Do not perform          | 60    | 93,8 |
| Orientation in Schools  |       |      |
| Perform                 | 07    | 11,0 |
| Do not perform          | 57    | 89,0 |
| Orientation in primary health care | | |
| Perform                 | 17    | 26,5 |
| Do not perform          | 47    | 73,5 |

Figure 1 Infection rates of American tegumentary leishmaniasis in the municipality of Vicência-PE, Jan / 2004 to Nov / 2014.

Figure 2 Infection rates of American tegumentary leishmaniasis in the municipality of Vicência-PE, Jan / 2012 to Nov / 2014.

Discussion

LTA occurs in both sexes and all age groups, meanwhile, in the country average, those older than 10 years predominate, representing 90% of the cases and the male sex, 74%, is perceived that in the study 84.3% were of women interviewed, which makes it possible to perceive the female willingness to participate in research and to seek health services, as opposed to men.12 The age distribution of the population to which the sample belongs is 39.1% of the age between 18-28 years may be due, at least partially, to the fact that the interviewers who were used in the field work belong to the community itself, allowing some confidentiality in the treatment of information.13 Analyzing data from LT and Ross’s work (1903), one can perceive a change in the epidemiological aspect of leishmaniasis. Previously, cutaneous leishmaniasis was basically considered a zoonosis of wild animals, being accidentally transmitted to humans as it entered the forests, for exploration, extraction of wood, opening of roads and mining, while today it is observed that area equivalence in the study.
The information on the prevention of diseases is an essential tool to develop health promotion projects. Due to the position geographical area of Brazil and its extensive territorial area, there are several infectious diseases and different according to the Brazilian regions. Some of them, however, are widely distributed in the territory and even with their expansion the populations are unaware of basic information such as prevention, symptoms and treatment. Vigilance management presents a challenge for local health systems, since it is not fully structured in municipalities and its managers do not always have the knowledge, physical and human material needed to develop actions adequately. Generally the population affected by LTA, or that is endemic area, has little information of what the disease is, with this, these authors carried out an educational activity with students and teachers of several schools of a municipality where they used posters, booklets and lectures, aiming at raising awareness and awareness of the group that had knowledge about the disease and could become informants of the disease in their homes and communities, helping to control the endemic and consequently improving the quality of life. The attributions of the professionals belonging to the Team were also established by Ordinance No. 648, of March 28, 2006 of the Ministry of Health, and can be complemented by local management, among them: health promotion and protection, disease prevention, diagnosis, treatment, rehabilitation and health maintenance) to individuals and families at USF and, when appropriate or necessary, at home and / or in other community spaces (schools, associations etc.), in all phases of human development: childhood, adolescence, adulthood and the elderly; during the time and frequency required according to the needs of each patient. As guidelines on health defined the following procedures as the main nursing care for the LTA patient: Inform the client about the importance of early treatment; Orient the client in relation to the transmission mechanism of the disease; Verify the likely type of transmission (wild or urban); Orient the client regarding the route of administration of the medication, according to medical prescription, and for the average duration of thirty days of treatment; Carry out cleaning of the lesions with 0.9% saline solution in jets, protecting them with non-adherent dressings; Attempt for complaints of upper airway obstruction, elimination of nasal crusts and epistaxis, as they may indicate hematogenous metastasis to the mucosa of the nasopharynx; Direct the client not to make use of alcoholic beverages during the treatment. The cause of higher incidence in this sex is related to the same concept of occurrence in adults, which is the greatest exposure to infected sandfly. The higher frequency of LT in men is also related to the fact that these are more present in extradomiciliary places, performing work activities, mainly in the vector habitat, while women are, in general, less exposed to agricultural regions and, in most cases, occupying intra and peri-residential environments. Therefore, the study was able to identify how nursing practice has developed in the prevention of American cutaneous leishmaniasis in the municipality of Vicência / PE, based on lectures, campaigns, nursing visits, home visits, leaflets, school and post orientation health, what
makes you think that it is desirable to be desired in most of these actions, due to lack of management strategies, organization, planning, control and activity stimulation in an attempt to achieve goals. It is worth noting that, in terms of infection rates for American tegumentary leishmaniasis in the last 3 years, the study was able to show the male population with an index well above the desired average, which makes rethinking of more effective prevention strategies such as guidance on the use of repellents, long-sleeved shirts, long trousers, socks and shoes, avoiding exposure during vector activity times (twilight and night), do not take pets to the working environment, no area Lizar burning and deforestation, pruning trees, in order to increase heat stroke in order to reduce soil shading and avoid favorable conditions for the development of larvae phlebotomines, periodic cleaning of pet shelters. However, when comparing these rates with infections in the past 10 years h ear pl and a decrease in considerable cases, despite the failure of nursing in the prevention and investigation, the Department of H ealth with the Agency Fi Cruz made use strategies of insecticides in the places of focus, in order to reduce the proliferation of the mosquito.

Given the results, the study could not point to the adoption of preventive measures by nurses and were not implemented tados any fighter project LTA decided by current health policy, which is to rever practices mainly nurses knowledge which has the ability to expose its knowledge about the problem and to develop, together with the Municipal Health Department, an effective project aimed at prevention. Thus, from these findings are suggested as actions to be developed by nurses based on Surveillance Manual and epidemiológica: identify health facilities and prof is sional who will attend the infected patients, capacitor professionals who will make the multi upe eq in diagnosis and treatment, sensitize professional network for suspected CLI single, establish routines of care to patients, training of teams of Programs of the communitarians people of Health, investigate all patients who evolved to death and indicate euthanasia only when diseased animals become aggravated for infections that may lead the animal to suffering. However, by performing such actions, the professional practice of nursing prevention becomes effective and complete.

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Conflict of interest

The author declares threr is no conflict of interest.

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Annex
Figure 1 Map of the city of Vicência / PE.
Source: Google Maps

Figure 2 Aerial photo of the city of Vicência / PE.
Source: Google Maps

Figure 3 Skin lesions
Source: Prepared by the authors

Figure 4 Skin lesions.
Source: Prepared by the authors

Figure 5 Informational booklet.
Source: Prepared by the authors

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