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NURSING DIAGNOSES IN SEROPOSITIVE PEOPLE BY HUMAN T LYMPHOTROPIC VIRUS

DIAGNÓSTICOS DE ENFERMAGEM EM PESSOAS SOROPOSITIVAS PELO VÍRUS LINFOTRÓPICO T HUMANO

DIAGNÓSTICOS DE ENFERMERÍA EN PERSONAS SEROPOSITIVAS POR VIRUS LINFOTRÓPICOS T HUMANOS

Luzinete Santos Souza[1]
Daniela Carneiro Sampaio[2]
Maria da Conceição Costa Rivemales[3]
Lavinya Lima Cordeiro Oliveira[4]
Ana Paula Santos de Jesus[5]
Claudia Feio da Maia Lima[6]
Nuno Damácio de Carvalho Félix[7]

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Objective: to identify nursing diagnoses in symptomatic and seropositive people for the human T lymphotropic virus. Method: documentary research, carried out with the medical records of people seropositive for the human T lymphotropic virus, registered at the Testing and Counseling Center of a municipality in inland Bahia state. The analysis of the records was performed based on Taxonomy II of NANDA-I 2018-2020. Results: 13 nursing diagnoses were identified, distributed in five domains: Comfort; Elimination and Exchange; Activity and rest; Self-perception; Coping/Stress Tolerance. The most prevalent diagnoses were: Chronic Pain, in 21 (100%) of seropositive individuals, urinary incontinence in nine (43%), and Impaired ambulation in 8 (38%). Conclusion: the identification of diagnoses in symptomatic and seropositive people for the human T lymphotropic virus provides support for the construction of specific nursing care plans.

Descriptors: Human T Lymphotropic Virus 1. Human T lymphotropic virus 2. Nursing Process. Nursing Diagnosis. Nursing care.

Objetivo: identificar diagnósticos de enfermagem em pessoas sintomáticas e soropositivas para o vírus linfotrópico T humano. Método: pesquisa documental, realizada nos prontuários de pessoas soropositivas para o vírus linfotrópico T humano, cadastradas no Centro de Testagem e Aconselhamento de um município do interior do estado da Bahia. A análise dos registros foi realizada com base na Taxonomia II da NANDA-I 2018-2020. Resultados: foram identificados 13 diagnósticos de enfermagem distribuídos em 5 domínios: Conforto; Eliminação e Troca; Atividade e

[1] Nurse. Specialist in Health Management from the Universidade Federal do Recôncavo da Bahia. Santo Antônio de Jesus, Bahia, Brazil. http://orcid.org/0000-0002-6508-3180.
[2] Bachelor in Health Interdisciplinarity. Universidade Federal do Recôncavo da Bahia. Santo Antônio de Jesus, Bahia, Brazil. daniela_sampaio1305@hotmail.com. http://orcid.org/0000-0002-0758-0189.
[3] Nurse. PhD in Nursing. Adjunct Professor at the Universidade Federal do Recôncavo da Bahia. Santo Antônio de Jesus, Bahia, Brazil. http://orcid.org/0000-0001-8407-0804.
[4] Bachelor in Health Interdisciplinarity. Universidade Federal do Recôncavo da Bahia. Santo Antônio de Jesus, Bahia, Brazil. http://orcid.org/0000-0003-2478-4869.
[5] Nurse. PhD in Sciences. Professor at the Universidade Federal do Recôncavo da Bahia. Santo Antônio de Jesus, Bahia, Brazil. https://orcid.org/0000-0003-0455-4943.
[6] Nurse. PhD in Nursing. Professor at the Universidade Federal do Recôncavo da Bahia. Santo Antônio de Jesus, Bahia, Brazil. http://orcid.org/0000-0002-4718-8683.
[7] Nurse. PhD in Nursing. Professor at the Universidade Federal do Recôncavo da Bahia. Santo Antônio de Jesus, Bahia, Brazil. http://orcid.org/0000-0002-0102-3023.

repouso; Autopercepção; Enfrentamento/Tolerância ao estresse. Os diagnósticos mais prevalentes foram: Dor crônica, em 21 (100%) dos soropositivos, Incontinência urinária em nove (43%), e Deambulação prejudicada em 8 (38%). Conclusão: a identificação dos diagnósticos em pessoas sintomáticas e soropositivas para o vírus linfotrópico T humano fornece subsídios para a construção de planos de cuidados de enfermagem específicos.

Descritores: Vírus 1 Linfotrópico T humano. Vírus 2 Linfotrópico T humano. Processo de Enfermagem. Diagnóstico de Enfermagem. Cuidados de Enfermagem.

Objetivo: identificar los diagnósticos de enfermería en personas sintomáticas y seropositivas para el virus linfotrópico T humano. Método: investigación documental, realizada en los registros médicos de personas seropositivas para el virus linfotrópico T humano, registradas en el Centro de Pruebas y Asesoramiento de un municipio en el interior del estado de Bahía. El análisis de los registros se realizó sobre la base de la Taxonomía II de NANDA-I 2018-2020. Resultados: se identificaron 13 diagnósticos de enfermería, distribuidos en cinco dominios: Confort; Eliminación e Intercambio; Actividad y descanso; Auto-percepción; Afrontamiento/tolerancia al estrés. Los diagnósticos más frecuentes fueron: Dolor crónico, en 21 (100%) de individuos seropositivos, incontinencia urinaria en nueve (43%) y deterioro de la ambulación en 8 (38%). Conclusión: la identificación de diagnósticos en personas sintomáticas y seropositivas para el virus linfotrópico T humano proporciona apoyo para la construcción de planes específicos de cuidados de enfermería.

Descriptores: Virus Linfotrópico T Humano 1. Virus Linfotrópico T humano 2. Proceso de Enfermería. Diagnóstico de Enfermería. Cuidado de Enfermería.

Introduction

Human T-cell lymphotropic virus (HTLV) can be divided into two types. Type I was initially associated with adult T-cell leukemia/lymphoma (ATLL) in Japan in 1977, and the virus was later associated with tropical spastic paraparesis/ HTLV-associated myelopathy neurological disease. Type II was identified in 1982 and associated with rare neurological cases[1].

There are approximately 20 million people infected with HTLV worldwide, located in certain areas of Africa, Central and South America, and Japan. In Brazil, the city of Salvador has one of the highest prevalence of the virus, ranging from 1.35% to 1.80%[2-3]. In Brazil, HTLV I/II contamination represents a public health problem, without a specific policy, being a disease that does not have much visibility when compared to other infectious diseases[4-5].

HTLV I/II infection can be transmitted vertically and horizontally. There is no cure and treatment for HIV-positive people and associated diseases constitute a challenging issue[4]. People affected by HTLV, in general, have a slow-course clinical picture or may even be asymptomatic for long periods[6]. The reasons for some individuals to evolve into HTLV I/II-associated diseases are still unknown, the most common being: HTLV-associated uveitis (HAU), adult T-cell leukemia/ lymphoma (ATLL), HTLV-associated myelopathy/ tropical spastic paraparesis (HAM/TSP), and dermatological abnormalities [5].

HTLV I/II-related diseases can lead to several comorbidities, when symptoms progress, including muscle weakness in the lower limbs and spasticity of varying degrees, and sphincter and sensory disorders[3]. Moreover, despite being a sexually transmitted infection, the dissemination of HTLV-related information is still precarious, as well as of its symptoms and routes of contamination, including among health professionals, including those in the nursing field[7].

Nurses should be able to develop and apply the Nursing Process to improve the quality of care and promote autonomy before different demands, presented through the identification of diagnoses and planning of the most appropriate interventions[8]. Thus, it is relevant to know about nursing diagnoses related to HTLV I/ II seropositive people, in order to guide them, direct care with the preparation of the care plan[8], and contemplate this gap in the knowledge of the subject.

Within this perspective, the present study aims to identify nursing diagnoses in symptomatic HTLV seropositive people.

Method

This is a documentary research, conducted between September 2016 and July 2017, at the Testing and Counseling Center (CTA) of a municipality in the Bahian grotto, based on the records made in the medical records of symptomatic HTLV I/II seropositive people.

All 21 medical records of symptomatic HTLV I/II seropositive patients registered in the CTA were analyzed. The selection of medical records respected the following inclusion criteria: people affected by HTLV I/II registered in the reference unit, aged over 18 years, symptomatic, living at the study site and who attended nursing consultations between 2011 and 2017.

Data collection involved the insertion of the researchers in the field of study to consult the medical records to characterize the profile of the study participants and analyze the completion of the data collection instrument, composed of the following identification data (name, gender, address, age, schooling, self-declared color, religion, origin, sexual orientation, marital status, number of children, professional occupation); diagnosis of HTLV, follow-up time at the CTA, existence of people in the family diagnosed with HTLV, co-infection with HIV, presence of symptoms, HTLV-related diseases, medications in use, date of last consultation; patient history (records of evolutions of nursing consultations).

In the accessed medical records, the intention was to identify the defining characteristics and related factors identified in the HTLV patient. Data were used to develop clinical reasoning to infer nursing diagnoses, according to the 2018-2020 NANDA-I taxonomy II framework[9]. The data were organized in table and chart using the Microsoft Excel 2016 program, presenting the absolute and relative frequencies, and discussed with the literature pertinent to the theme.

The aspects involving researches with human beings were respected, through the submission and approval of the project to the Research Ethics Committee at the Federal University of Recôncavo da Bahia, CAAE n. 88512518.9.0000.0056. The researchers followed all the principles and norms pre-established by the National Health Council Resolution n. 466/2012, using the term trustee.

Results

The Testing and Counseling Center/ Specialized Care Service (CTA/SAE) of Santo Antônio de Jesus (BA) has registered 21 symptomatic people affected by HTLV I/II. Of these, 18 are female (85%) and only 3 are male (15%). Regarding the age group, the highest number were 6 people over 60 years of age (28%), and the married marital status had a higher frequency, totaling 12 people (57%). Regarding HTLV type, 12 people have HTLV I and II (58%) and 9 people are affected only by HTLV I (42%).

The presentation and analysis of nursing diagnoses were listed by domains, favoring the identification of areas of knowledge essential for the care of symptomatic HTLV I/II seropositive people, followed-up at the CTA. Thus, Table 1 presents the nursing diagnoses identified in the medical records, according to their absolute and relative frequency.

Table 1 – Distribution of NANDA-I nursing diagnoses in people living with the human T lymphotropic virus. Santo Antônio de Jesus, Bahia, Brazil – 2011-2017 (continued)

Domain	Nursing diagnoses	N*	%**
Comfort	Chronic pain	21	100%
Elimination and Exchange	Impaired urinary elimination	9	43%
	Urgent urinary incontinence	9	43%
	Functional urinary incontinence	9	43%

Table 1 – Distribution of NANDA-I nursing diagnoses in people living with the human T lymphotropic virus. Santo Antônio de Jesus, Bahia, Brazil – 2011-2017 (conclusion)

Domain	Nursing diagnoses	N*	%**
Activity and rest	Impaired ambulation	8	38%
	Impaired physical mobility	8	38%
	Fatigue	8	38%
Self-perception	Chronic low self-esteem	1	5%
	Situational low self-esteem	1	5%
Coping/Stress Tolerance	Anxiety	1	5%
	Feeling of impotence	1	5%
	Social isolation	1	5%

Source: Created by the authors.

Notes:
* Absolute frequency.

** Relative frequency.

Given the identification of nursing domains and diagnoses indicated in Table 1, and based on the Taxonomy of NANDA-I (2018-2020)[9], it was possible to identify 12 nursing diagnoses distributed in 5 domains. The most prevalent nursing diagnosis was chronic pain, totaling 21 (100%) people affected by HTLV.

Following, the domain Elimination and exchange, with the diagnoses of impaired urinary elimination, urgent urinary incontinence, and functional urinary incontinence, totaling nine (43%) symptomatic seropositive. A possible factor related to diagnosis of impaired urinary elimination is the sensorimotor damage and urinary tract infection; urinary incontinence is related to the inability to reach the bathroom in time and to avoid urinary loss; and, finally, the diagnosis of functional urinary incontinence, which may be associated with weakening of pelvic support structures, neuromuscular limitations and psychological factors.

In the Activity and rest domain, there were three Nursing diagnoses detected: impaired ambulation, impaired physical mobility and fatigue, which totaled eight (38%) participants. Regarding less frequent nursing diagnoses, we mention two Nursing Diagnoses from the self-perception domain, chronic self-esteem and situational low self-esteem, in one (5%) symptomatic HIV-positive person. In the domain Coping and stress tolerance, anxiety and feeling of impotence were identified in one (5%) seropositive person.

Chart 1 describes the nursing diagnoses with the related factors and defining characteristics found in the research.

Chart 1 – NANDA-I nursing diagnoses with related factors and defining characteristics of people with the human T lymphotropic virus. Santo Antônio de Jesus, Bahia, Brazil - 2011-2017 (continued)

Nursing Diagnoses	Related Factors	Defining Characteristics
Comfort		
Chronic pain	Chronic physical disability Chronic psychosocial disability	Change in the ability to continue previous activities Fatigue Depression
Elimination and exchange		
Impaired urinary elimination	Sensorimotor damage Urinary tract infection	Dysuria Frequency Incontinence Urinary urgency

Chart 1 – NANDA-I nursing diagnoses with related factors and defining characteristics of people with the human T lymphotropic virus. Santo Antônio de Jesus, Bahia, Brazil - 2011-2017 (conclusion)

Nursing Diagnoses	Related Factors	Defining Characteristics
Elimination and exchange		
Urgent urinary incontinence	Reduced bladder capacity Use of diuretics	Inability to reach the bathroom in time and prevent urinary loss Reports of inability to reach the bathroom in time to prevent loss of urine.
Functional urinary incontinence	Weakening of pelvic support structures Neuromuscular limitations Psychological factors	The time needed to reach the bathroom exceeds the time between the feeling of urgency to urinate and involuntary emptying of the bladder Loss of urine before reaching the toilet.
Activity and rest		
Impaired ambulation	Pain Insufficient muscle strength Neuromuscular damage	Impaired ability to walk uphill Impaired ability to walk downhill Impaired ability to climb up and down sidewalks Impaired ability to travel the necessary distances
Impaired physical mobility	Anxiety Pain Decreased muscle strength Activity intolerance Decreased resistance	Limited ability to perform fine motor activities Reduced capacity to perform gross motor activities Gear change
Fatigue	Illness status Impaired physical condition Increased physical effort	Lack of energy Report of tiredness Increased physical complaints
Self-perception		
Chronic low self-esteem	Ineffective adaptation Lack of affection Repeated failures Psychiatric disorder	Self-assessment as unable to deal with events Guilt feeling report
Situational low self-esteem	Failure Change in social role Rejections	Self-assessment as unable to deal with situations Undecided behavior
Coping/Stress tolerance		
Anxiety	Threat to health status Change in health status Stress	Affective (fear, uncertainty, anguish) Behavioral (reporting concerns due to changed life events) Parasympathetic (urinary frequency, urinary urgency) Sympathetic (weakness)
Feeling of impotence	Health care environment Disease-related regime	Dependence on others Report of frustrations regarding the inability to perform previous activities
Social isolation	Change in mental status Unacceptable social values Altered wellness	Disease Inability to meet others' expectations Experience feelings of difference from others

Source: Created by the authors.

Discussion

The factors related to the diagnosis of impaired urinary elimination presented by seropositive individuals were sensorimotor damage and urinary tract infection. Dysuria, frequency, incontinence and urinary urgency were present as defining characteristics. In the earliest stages, the most frequent urinary symptoms are nocturia, urgency, urinary incontinence and dysuria, with progression to feeling of voiding effort, incomplete bladder emptying and incontinence[1].

Among the studies conducted and in view of the data found in this research, most of the symptomatic HTLVI/II seropositive tend to develop urinary problems throughout their lives. Regarding non-controllable symptoms, quality of life ends up being affected, causing changes in daily life and negative feelings, sadness, anguish and suffering, interfering in biopsychosocial issues[7-8].

The autonomy and well-being of these people are affected due to the risk of involuntary loss of urine, annoying odor and/or feeling of shame and embarrassment in some situations, which usually results in social isolation. With the increase in urinary frequency, there is a limitation of activities of daily living, especially for HIV-positive people who work outside the home[3].

In view of these specified symptoms, it is important that nurses be based on scientific knowledge about HTLVI/II to assist symptomatic HIV-positive individuals in their self-care, identifying possible nursing diagnoses for the preparation of the care plan, through care systematization[3].

For urgent urinary incontinence, the related factor was decreased bladder capacity. The defining characteristics identified were the inability to reach the bathroom in time and avoid urinary loss and reports of inability to reach the bathroom in time to avoid urine loss.

The presence of a disability or disease capable of affecting a person's physical condition can lead to other changes, such as impaired self-esteem and self-image. In view of urinary incontinence, discomfort, insecurity and the feeling of failure are observed, negatively interfering in people's lives.

The fear of getting wet in public, the odor and lack of control of the body itself lead seropositive people to frailty, low self-esteem, social isolation, repression of sexuality and reduced sexual life, thus requiring the presence of qualified professionals to direct care. The therapeutic plan for these people should consider these issues, in addition to all possible neurological alterations that HTLV I-II can cause, and sexual alterations, often ignored during treatment[4,10].

This study showed that the majority, 18 (85%), of those affected by the symptoms of urinary incontinence were women. A study on the impact of urinary incontinence highlighted that incontinent women resist seeking treatment due to the embarrassment of talking about their problem, and, thus, end up unaware of the appropriate forms of care and the facts that can contribute to the worsening of their quality of life[11].

Functional urinary incontinence results from the weakening of pelvic support structures, neuromuscular limitations and psychological factors[12]. Changes in the lives of HIV-positive people end up generating insecurity for the relationship with other healthy people. This condition causes feelings of difference, inferiority, affecting their self-esteem[3].

A considerable part of the study participants, eight (38%) presented impaired ambulation, whose related factors included: limited resistance capacity, pain, impaired balance, insufficient muscle strength and neuromuscular impairment. The defining characteristics presented were: impaired ability to walk uphill, impaired ability to walk downhill, impaired ability to climb up and down sidewalks, impaired ability to travel the necessary distances.

As HTLVI/II is a degenerative and disabling infection, it can make symptomatic people to need to use orthosis for locomotion, such as: walking sticks, walker and even a wheelchair[13-14]. Motor limitation can lead them to hide their health condition because of the stigma attached to the disease. Thus, in an attempt to rule out

the possibility of negative judgments before their serological condition, seropositive individuals tend to justify that the impairment and/or limitation presented is due to another problem distinct from HTLV[4].

Regarding factors related to impaired physical mobility, seropositive individuals presented anxiety, pain, decreased muscle strength, activity intolerance and decreased resistance. As defining characteristics: limited ability of these people to perform fine motor, thick motor activities and gait change.

Neurological alterations related to HTLVI/II are considered important causes for this diagnosis. One of them is tropical spastic paraparesis/myelopathy associated with HTLV-1 (HAM/TSP), which is a neurological, myelopathic disease, derived from HTLV I virus, which slowly and progressively manifests itself in the lower limbs, preventing people from performing their activities, which can lead to anxiety, frustration and even depression[15].

Impaired physical mobility can cause complications, such as altered gait, which can generate a high risk for falls, inability to return to work activities, difficulty getting around at home. Thus, it implies the emergence of other morbid conditions that aggravate the quality of life of these people, making them increasingly dependent on others' care[2-3].

Regarding the diagnosis Fatigue, the poor physical condition and the increased physical exertion were observed as a factor related to the disease status. As defining characteristics, lack of energy, the report of tiredness and the increase in physical complaints. Muscle strength deficits are responsible for important functional changes due to typical HTLV I/II-related symptoms. The affected people end up limiting their activities, and this reduction causes significant losses of their productions, further limiting independence[16].

The loss of the ability to perform activities in the most productive phase of life contributes to reduced self-esteem, loss of confidence in oneself, depression and social isolation[4,10]. For HIV-positive individuals with chronic low self-esteem, the related factors identified were ineffective adaptation before limitations imposed by the disease, lack of affection, repeated failures and psychiatric disorder. Regarding the defining characteristics, the self-assessment reported is being unable to deal with situations and the report of guilt feeling.

For being a sexually transmitted infection, incurable, with low knowledge on the part of the population and professionals[17], both the seropositive and their families have difficulties in coping with the diagnosis of HTLV I/II, and this can directly affect their self-esteem[7]. The family is an important and fundamental source of social support for the sick person[18]. Nursing has the role of working together with other health professionals, aiming to provide guidance and emotional support to these people and their families, to reduce prejudice and humanize social relationships[19].

The observed factors related to situational low self-esteem are feelings of failure before the disease diagnosis, functional impairment, change in social role and rejections. As defining characteristics, the self-analysis as unable to deal with events, undecided behavior. The person who lives with HTLV I/II faces several situations in their daily lives, including living with a chronic and disabling disease, facing symptoms related to the virus, living with prejudice from society, and the fear of transmitting the virus, which make them unable to deal with situations involving personal values[3,7].

The nursing diagnosis Anxiety was found in the participants and was related to the threat to health status, change in health status and stress, characterized by affective (fear, uncertainty, anguish), behavioral (report of concerns due to change in life events), parasympathetic (urinary frequency, urinary urgency) and sympathetic (weakness) manifestations.

This feeling can occur due to the threats to the health status that the virus imposes on HIV-positive people, characterized by fear, anguish and uncertainties before an incurable, degenerative and disabling pathology, and because they have to face prejudice from society, because it is a sexually transmitted

disease[4]. The importance of social help to the symptomatic HTLV I/II person is fundamental, as it shows possibilities to deal with the disease, helping him/her in the reorganization of the life projects[3].

The diagnosis Feeling of impotence has the factors related to the health care environment and the disease-related regimen. As defining characteristics, dependence on others and frustrations regarding the inability to perform previous activities. This frustration is common in people affected by the virus who become dependent on others to perform activities of daily living after the progression of symptoms. And those who have not yet had the progress of symptoms, upon meeting other people with the same pathology, especially in the health service, with more advanced conditions, may become apprehensive, distressed and afraid of the future[4].

These concerns end up limiting them to living harmoniously with their own feelings, leaving them frustrated about their inability to live like anyone else. The related factors of the nursing diagnosis Acute pain were harmful agents, such as biological, physical, psychological and expressive behavior, and as a defining characteristic, there were verbal reports of pain. Pain is a very unpleasant experience, emotional and mental, with a sudden or slow onset, and may have mild or intense intensity[12].

In view of pain symptoms, the person may have impaired functional capacity, besides causing serious damage to his/her quality of life, including social isolation[15]. Acute pain is different from chronic pain, requiring nurses to evaluate and identify each type, through careful analysis and correct records, in order to implement the proper therapy, ensuring the well-being of these people[20].

As for Chronic pain, the related factors were chronic physical disability and chronic psychosocial disability. The defining characteristics identified were the change in the ability to continue previous activities and fatigue. In this study, pain-related nursing diagnoses were the most visible, i.e., they demonstrated that HTLV I/II seropositive patients suffer with the symptoms, which probably direct them to seek the service.

Pain has several impacts on people's lives, and when it is chronic, the effect on the quality of their lives is more intense. Thus, there is need for a broad analysis, so that the nurse, through the establishment of the nursing process, performs an essential role in recognizing this condition with the implementation of accurate diagnoses and effective interventions. Pain complaints should be accepted and respected by health professionals and should never be underestimated[21].

Social isolation is a loneliness experienced and perceived as imposed by others and a negative or threatening state[12]. In this context, the related factors identified involved changes in the mental status of HIV-positive individuals (depression, low self-esteem, anxiety, unacceptable social values, and altered well-being).

As defining characteristics, the disease itself causes these people to become isolated due to the limitations exposed by the virus, which make them unable to meet the expectations of society, making them feel different from others. After diagnosis, the lives of HIV-positive individuals change, not only because they experience consequences and prejudice, but also because they have to seek overcoming and better living conditions[3,7].

Among the limitations of the study, two main ones stand out; limitations in the search for up-to-date information on HTLVI/II studies, as scientific production related to this theme is still incipient. This fact corroborates the unawareness of health professionals and the general population about the infection. The other limitation refers to incomplete medical records. There is need to reinforce to health professionals on the importance of complete and detailed records, in order to allow identifying related factors, necessary for a complete structuring of nursing diagnoses.

In addition, the present study may contribute to nursing professionals' differentiated look at people suffering from HTLV I/II symptoms.

Conclusion

The study allowed identifying 13 nursing diagnoses in HTLV I/II seropositive patients. The most frequent were pain, which affected 100% of these people, followed by urinary incontinence in 43%, and impaired ambulation in 38% of people affected by the virus. The findings confirm the importance of identifying Nursing problems in HTLV I/II seropositive individuals to trace nursing diagnoses in order to provide support for the construction of specific care plans, with emphasis on the better quality of life of people affected by this virus.

The study presents data that highlight the importance of knowledge of nursing diagnoses in HTLV I/II seropositive patients, revealing the need for greater attention to comfort, elimination and exchange activities, activity and rest. It is important that the nurse be able to elaborate effective care plans, taking into account the biological, physiological, psychological, emotional and social aspects, reflecting on the quality of life of people affected by HTLV, providing subsidies for self-care.

Based on the findings in this research, there is a need for new studies addressing possible interventions to solve the diagnoses identified, in addition to the identification of other nursing diagnoses related to HTLV I/II, aiming to favor control to obtain satisfactory outcomes that direct an evidence-based care practice, enabling the improvement of the picture of HTLVI/II seropositive individuals and reflecting on their well-being and quality of life.

Collaborations:

1 – conception, design, analysis and interpretation of data: Luzinete Santos Souza, Daniela Carneiro Sampaio, Maria da Conceição Costa Rivemales and Lavinya Lima Cordeiro Oliveira;

2 – writing of the article and relevant critical review of the intellectual content: Luzinete Santos Souza, Daniela Carneiro Sampaio, Maria da Conceição Costa Rivemales, Lavinya Lima Cordeiro Oliveira, Ana Paula Santos de Jesus, Claudia Feio da Maia Lima and Nuno Damácio de Carvalho Félix;

3 – final approval of the version to be published**:** Luzinete Santos Souza, Daniela Carneiro Sampaio and Maria da Conceição Costa Rivemales.

References

1. Horiguchi CLF, Damásio MAS, Bastos RHC, Freitas GS, Borowiak DR, Santos MM, et al. HTLV-1/2 transmission in family groups: possible routes of contamination. Rev Med Minas Gerais. 2014;24(Suppl 6):S33-S39. DOI: 10.5935/2238-3182.20140083

2. Santos RFS, Conceição GC, Martins MS, Kraychete A, Penalva MAC, Carvalho EM, et al. Prevalence and risk factors for Human T-Lymphotropic Virus Type 1 (HTLV-1) among maintenance hemodialysis patients. BMC Nephrology. 2017;18:64. DOI 10.1186/s12882-017-0484-y

3. Santos ACC, Soares DJ, Rivemales MCC. (Un)Familiarity, illness and limitations imposed by HTLV: experiences of HIV positive women. Cad saúde colet. 2017 Mar;25(1):45-50. DOI: 10.1590/1414-462x201700010186

4. Santos VS, Rivemales MCC. Facilities and dificulteis found in the process of advising people living with HTLV - Cienc Cuid Saude. 2012;11(3):542-8. DOI: 10.4025/cienccuidsaude.v11i3.20262

5. Zihlmann KF, Mazzaia MC, Alvarenga AT. Meanings of breastfeeding interruption due to infection by human T cell lymphotrophic virus type 1 (HTLV-1). Acta paul enferm. 2017;30(1):80-6. DOI: 10.1590/1982-0194201700012

6. Pereira WA, Mesquita EM. Vírus linfotrópico de células T humana (HTLV): doenças associadas e dificuldades no diagnóstico e tratamento. Rev Cienc Saude [Internet]. 2015 [cited 2019 Apr 22];17(1):40-6. Available from: http://www.periodicoseletronicos.ufma.br/index.php/rcisaude/article/view/4659

7. Santos MA, Alves RCP, Oliveira VA, Ribas CRP, Teixeira CRZ, Zanetti ML. Social representations of people with diabetes regarding their perception of family support for the treatment. Rev esc enferm USP. 2011 Jun;45(3):651-8. DOI: 10.1590/S0080-62342011000300015

8. Soares DJ, Santos ACC, Rivemales MCC. Knowledge of family health program nurse about human T-lymphotropic virus. Enfermagem Brasil. 2018;17(2):75-82. DOI: 10.33233/eb.v17i2.1009

9. NANDA Internacional Inc. Diagnósticos de enfermagem da NANDA-I: definições e classificação 2018-2020. 11a ed. Porto Alegre: Artmed; 2018.

10. Paranhos RFB, Paiva MS, Carvalho ESS. Sexual and emotional experiences of women with urinary incontinence secondary to HTLV. Acta paul enferm. 2016;29(1):47-52. DOI: 10.1590/1982-0194201600007

11. Cestari CA, Souza THC, Silva AS. Impact of urinary incontinence in the quality of living of elderly. Rev Ciênc Estud Acad Med. 2017;1(7):27-37.

12. Herdman TH, Kamitsuru S. Diagnósticos de Enfermagem da NANDA-I: Definições e Classificação, 2015-2017. 10a ed. Porto Alegre: Artmed, 2015.

13. Champs APS, Passos VMA, Barreto SM, Vaz LS, Ribas JGR. HTLV-1 associated myelopathy: clinical and epidemiological profile in a 10-year case series study. Rev Soc Bras Med Trop. 2010;43(6):668-72. DOI: 10.1590/S0037-86822010000600013

14. Delazeli LM, Santos LR, Mendes SMD, Baptista AF, Sá KN, et al. Impact of socio-demographic and clinical aspects in quality of life of patients with HTLV-I HAM/TSP. Rev Pesq Fisiot. 2012;2(1):43-55. DOI: 10.17267/2238-2704rpf.v2i1.85

15. Gascón MRP, Santos RF, Capitão CG, Fantine-Nogueira MC, Oliveira ACP. A body that loses sense: a psychoanalytical reading of patients with tropical spastic paraparesis. Rev SBPH [Internet]. 2013 [cited 2019 Apr 22];16(1):33-48. Available from: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1516-08582013000100003&lng=pt

16. Figueiredo-Neto I, Mendonça RP, Nascimento CA, Mendes SMD, Sá KN. Fortalecimento muscular em pacientes com HTLV-I e sua influência no desempenho funcional: um estudo piloto. Rev Pesq Fisiot. 2013;2(2):143-55. DOI: 10.17267/2238-2704rpf.v2i2.96

17. Assis MN, Andrade ACR, Rogenski KE, Castilho V, Fugulin FMT. Nursing interventions in pediatric care: a contribution to measuring workload. Rev esc enferm USP. 2015;49(spe 2):83-9. DOI: 10.1590/S0080-623420150000800012

18. Araújo YB, Reichert APS, Vasconcelos MGL, Collet N. Fragility of the social network of families of children with chronic disease. Rev bras enferm. 2013;66(5):675-81. DOI: 10.1590/S0034-71672013000500006

19. Oliveira RM, Silva LMS. Chronic pain related to AIDS: perspective of nurses and doctors. Rev bras enferm. 2014;67(1):54-61. DOI: 10.5935/0034-7167.20140007

20. Castro-Moura C, Chaves ECL, Salgado SVH, Hollanda LD, Gama RCR, Silva PCM, et al. Impactos da dor crônica na vida das pessoas e a assistência de enfermagem no processo. Av enferm. 2017;35(1):53-62. DOI: 10.15446/av.enferm.v35n1.58898

21. Lima F, Pichelli A, Silva JA. The life with HIV/AIDS in seropositive women. In: Congresso Ibero-Americano de Investigação Qualitativa em Saúde, 3, 2014, Badajoz, ESP. Anais (on-line) Badajoz (ESP): Atas CIAIQ, 2014. v. 2 [cited 2019 Apr 22]. Available from: https://proceedings.ciaiq.org/index.php/CIAIQ/article/view/554/549

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