

## SYSTEMATIZATION OF NURSING CARE FOR PATIENTS WITH HIV AND SYPHILIS: AN EXPERIENCE REPORT

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### ABSTRACT

Acquired immunodeficiency syndrome (AIDS), caused by HIV, compromises the immune system, being transmitted by bodily fluids, sexual intercourse, injection drug use, contaminated transfusions or from mother to child. The disease evolves in four stages: acute infection, clinical latency, initial symptomatic phase, and AIDS, with symptoms ranging from flu-like to severe opportunistic infections. Syphilis, caused by the bacterium *Treponema pallidum*, has primary, secondary and tertiary stages, and can progress to serious complications such as neurosyphilis. The systematization of nursing care (NCS) is essential for patients with HIV and syphilis, promoting individualized care based on nursing diagnoses (NANDA-I, NIC, NOC), aiming at safety, treatment adherence and quality of life. The interdisciplinary and humanized approach strengthens care, highlighting the role of nurses in education, prevention and emotional support.

**Keywords:** HIV/AIDS. Systematization of Nursing Care.

### INTRODUCTION

Acquired immunodeficiency syndrome (AIDS) is characterized as a severe form of a set of diseases linked to infection with the human immunodeficiency virus (HIV). HIV belongs to the group of retroviruses (BRUNNER et al, 2019). It is transmitted through bodily fluids, through sexual intercourse with an HIV-positive partner, and through the use of intravenous or injectable substances, blood transfusions or contaminated blood products, children born to HIV-infected mothers, and health professionals exposed to biological materials from infected patients (BRUNNER et al, 2019).

According to the World Health Organization (WHO), approximately 39 million people in the world live with HIV/AIDS. According to de Mesquita Matos and Zollner (2021), in Brazil there were about 355,868 cases of HIV between the years 2010 and 2021, where the year with the highest incidence was 2018 with 12.84% confirmed cases. The human immunodeficiency virus is responsible, where the immune system is affected, which is responsible for defending the body against diseases.

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The disease can be classified into 4 stages and for definition include physical examination, clinical history, laboratory tests, signs and symptoms, and other infections or malignant neoplasms (BRUNNER et al, 2019). The stages of the disease are classified as: 1) acute infection; 2) asymptomatic phase, also known as clinical latency; 3) early or early symptomatic phase; and 4) AIDS. ((BRASIL. Ministério da Saúde, 2025)

According to the Ministry of Health, acute HIV infection occurs in up to 90% of cases, with symptoms appearing between five and 30 days after exposure. During high viremia, there is a temporary drop in CD4+ T lymphocytes and an increase in CD8+ T lymphocytes. Symptoms range from a flu-like condition to more severe manifestations, such as neuropathy and meningoencephalitis. Diagnosis is rare, and tests may indicate transient changes in the blood. Symptoms last an average of 14 days, and their persistence can accelerate progression to AIDS.

The second phase of HIV infection is the chronic phase, also known as asymptomatic infection or clinical latency. During this period, the virus continues to replicate in the body, but at reduced levels. Many people do not have symptoms at this stage. Without antiretroviral treatment (ART), progression to AIDS usually occurs after a decade or more, although in some cases it may be more rapid. Individuals who follow the appropriate treatment can remain in this phase for several decades. (NATIONAL INSTITUTES OF HEALTH, 2025)

In the initial symptomatic phase of HIV, there is a sharp drop in CD4+ T lymphocytes, reaching less than 200 cells per mm<sup>3</sup> of blood, while in healthy adults this number varies between 800 and

1.200. The most frequent symptoms of this stage include fever, diarrhea, night sweats, and weight loss. (BRAZIL. Ministry of Health, 2025)

Opportunistic diseases appear due to low immunity, they take advantage of the body's vulnerability. In this way, the infection can progress to the most serious stage, AIDS. Individuals who reach this stage are more susceptible to diseases such as viral hepatitis, tuberculosis, pneumonia, toxoplasmosis and certain types of cancer. (BRAZIL. Ministry of Health, 2025)

According to PAIXÃO et al (2022). Nursing care is very important for patients with HIV/AIDS, as it directs the promotion of treatment, resulting in greater adherence by patients to appropriate treatment. In addition to HIV/AIDS, other sexually transmitted diseases (STDs) also require specific care, such as syphilis.

Syphilis is an infectious disease that can manifest itself acutely or chronically, being caused by the bacterium *Treponema pallidum*. It is classified into three clinical stages: primary, secondary, and tertiary. Early detection of syphilis is essential for effective treatment, avoiding



complications and transmission of the disease. In this context, nursing plays an essential role in health education, in the screening and follow-up of patients, promoting strategies for the control and prevention of STIs.

According to the Ministry of Health, syphilis can be transmitted from one person to another through unprotected sexual intercourse, through contaminated blood transfusion, and during pregnancy and childbirth. It is divided into stages (which reflect the period between infection and the manifestation of signs and symptoms) when the individual is not undergoing treatment (BRUNNER et al, 2019).

Primary syphilis occurs in the period of 2 to 3 weeks, after the virus is inoculated, generating a painless lesion at the site called "cancer", if left untreated, disappear without treatment within 2 months. Secondary disease appears after 2 to 8 weeks, when microorganisms spread hematologically, then affecting the trunk and limbs (some signs include lymphadenopathy, arthritis, meningitis, hair loss, weight loss, and fever); After this, the disease enters a latency period (where at this stage, in most cases, the patient does not have any symptoms). Finally, the final stage is considered tertiary syphilis, where most patients have no signs and symptoms, being slowly progressive, affecting multiple organs, including arthritis, neurosyphilis, psychosis, paresis, stroke, and meningitis (BRUNNER et al, 2019).

The patient selected for this study has tertiary syphilis. Brunner et al, (2019), highlight that tertiary syphilis is the last stage, 20 to 40% of individuals with syphilis are asymptomatic. Syphilis in the third stage presents itself as an inflammatory disease that evolves slowly, and can compromise several organs. The most common signs and symptoms at this stage are neurosyphilis and aortitis, which can cause dementia, paresis, psychosis, meningitis, or stroke.

Given the complexity and severity of these manifestations, it is essential that patient care is provided in a structured and effective manner. In this context, the systematization of nursing care (NCS) becomes an extremely important tool, as it improves care practice, based on critical thinking, knowledge and clinical decision-making. Thus, providing greater safety to patients, since, in order to be implemented, it is necessary for the nurse to make a clinical judgment, in addition to offering greater autonomy to the nursing team, being a support of scientific evidence.

## **OBJECTIVE**

The objective of this study is to describe the importance of systematizing nursing care for patients with the Human Immunodeficiency Virus (HIV) and Syphilis, based on an experience report. The aim of this study is to report the application of the systematization of nursing care (NCS) in an inpatient, identifying and describing the main nursing diagnoses based on the



NANDA-I, NIC and NOC taxonomies. In addition, it is intended to develop an individualized care plan, highlighting interventions and goals aimed at patient recovery, as well as discussing the relevance of NCS in promoting safety, professional autonomy and quality of care. Finally, the study aims to highlight the importance of an interdisciplinary and humanized approach in the treatment of patients with complex clinical conditions, contributing to the improvement of the care provided by the nursing team.

## **METHODOLOGY**

This is a descriptive study of the experience report type, carried out in a public hospital in the municipality of Foz do Iguaçu- PR, from November to December 2023, during the supervised practical classes of the discipline of Nursing in Medical-Surgical Clinic. Data on nursing history were collected through anamnesis, physical examination and analysis of medical records, with the aim of providing individualized nursing care. In view of the patient's needs clarified, it was possible to identify the correct care, involving the taxonomies NANDA-International (NANDA-I), Classification of Nursing Interventions (NIC) and Classification of Nursing Outcomes (NOC), thus enabling the elaboration of a nursing care plan.

## **DEVELOPMENT**

The study was based on a patient with HIV, Syphilis and Clostridium toxin B. In the first contact with the patient, a physical examination and anamnesis were performed, gathering information about his current state, he presented on the 14th day of hospitalization (IHL), 21 years old, 67 kg, the main reason for hospitalization was the diagnosis of cellulitis in the left lower limb (LLM) due to trauma, later serological tests were carried out in which they were positive for Syphilis, HIV and Clostridium toxin B.

A patient with a history of depression and constant anxiety crises, due to various psychological problems and bullying during his life, he has been monitored by a psychologist and has been using irregular drug therapy for more than 7 years, former alcoholic and former smoker.

Conscious, oriented in time and space, normal-colored, hydrated, breathing in room air, eating a high-calorie diet due to low weight, with a companion.

On physical examination, the chest was intact and symmetrical, BCNF at 2T. MV+, with no adventitious sounds. Flat and flabby abdomen, peristaltic movements +. Clean MMSS, with AVP on MSD without phlogistic signs. MIE identified with cellulite and loss of strength, capillary refill time <3s. Vital signs: T: 36.2 °C (normothermic); P: 74 bpm (normosphygmia) R:16 rpm



(normopneic) PA: 120x80 mmHg (normotensive). Subsequently, the electronic medical record was consulted to identify the patient's history, conditions of arrival and reason for admission, treatment performed, and evolution of the clinical condition.

After identifying the problems, 7 nursing diagnoses were prioritized, namely: bowel incontinence, risk of compromised human dignity, risk of infection, decreased involvement in recreational activities, risk of electrolyte imbalance, ineffective sexuality pattern and risk of post-change stress syndrome.

**Chart 1: Nursing diagnoses, interventions, and objectives.**

1. Nursing diagnosis: Risk of electrolyte imbalance related to diarrhea.	
Basic human need affected: Electrolyte Elimination and Regulation.	
Expected results	Nursing Interventions
The patient will maintain electrolyte balance.	<ul style="list-style-type: none"> <li>● Monitor electrolyte levels;</li> <li>● Monitor intestinal eliminations (frequency, volume, color and shape);</li> <li>● Stimulate fluid intake.</li> </ul>
2. Nursing diagnosis: Decreased involvement in recreational activities related to self-prejudice about self-report diagnosis	
Basic human need affected: communication; recreation; leisure; acceptance; self-esteem; acceptance.	
Expected results	Nursing Interventions
The patient will show interest in recreational and leisure activities	<ul style="list-style-type: none"> <li>● Evaluate the factors that cause disinterest in activities;</li> <li>● Encourage participation in recreation and leisure activities;</li> </ul>
3. Nursing diagnosis: Bowel incontinence related to self-report	
Basic human need affected: Elimination; Self-esteem.	
Expected results	Nursing Interventions
Patient shows improvement in bowel incontinence	<ul style="list-style-type: none"> <li>● Assess for signs and symptoms, such as involuntary stool loss, fecal urgency, constipation, and diarrhea</li> <li>● Stimulate or patient the practice exercises towards Strengthening the pelvic floor</li> <li>● Evaluate whether the presence of lesions in the skin region exposed to feces;</li> <li>● Avoid prolonged exposure of the skin to feces;</li> </ul>
4. Nursing diagnosis: Risk of infection related to immunosuppression and anemia	
Basic human need affected: Security; protection.	
Expected results	Nursing Interventions
Reduce/avoid the risk of infection.	<ul style="list-style-type: none"> <li>● Perform hand hygiene before and after contact with the patient;</li> <li>● Advise the patient on the importance of up-to-date vaccination;</li> <li>● Monitor for signs and symptoms of infection such as fever, chills, pain, swelling, redness, purulent discharge, foul odor, general malaise, fatigue, loss of appetite, and mental status changes.</li> </ul>
5. Nursing diagnosis: Ineffective sexuality pattern related to changes in sexual behavior evidenced by insufficient knowledge about alternatives related to sexuality.	
Basic human need affected: sexuality; self-esteem; Self-acceptance	
Expected results	Nursing Interventions
The patient will show improvement in the pattern of sexuality	<ul style="list-style-type: none"> <li>● Sexual counseling;</li> <li>● Emotional support;</li> </ul>
6. Nursing diagnosis: Risk of compromised human dignity related to stigmatization	
Basic human need affected: Acceptance; self esteem; sexuality.	
Expected results	Nursing Interventions
The patient's dignity will be preserved	Promoting family involvement Support for Decision Making



Guidance on the Health System	
7. Nursing diagnosis: Risk of post-change stress syndrome	
Basic human need affected: Acceptance; safety; freedom;	
Expected results	Nursing Interventions
Reduce/avoid the risk of post-move stress	<ul style="list-style-type: none"><li>● Ensure the privacy and confidentiality of patient information;<ul style="list-style-type: none"><li>● Listen carefully to the patient;</li></ul></li><li>● Clarify doubts and myths related to the change;</li><li>● Encourage the patient to seek social support.</li></ul>

The nurse's work involves the creation of interventions based on the nursing diagnosis, which is elaborated through the critical analysis of the data collected during the anamnesis, the physical examination and the laboratory results. Therefore, it is essential that the professional understands the responses of patients with infectious diseases to meet their basic health needs, since these needs are interrelated and can be affected by the imbalance of one of them (Vasconcelos et al., 2013)

The nursing diagnosis Risk of electrolyte imbalance related to diarrhea, can lead to serious electrolyte disturbances. For this reason, it is important to monitor electrolytes and fluid intake to maintain balance.

Engaging in decreased recreational activities may lead to a reduction in participation in recreational activities, or it may impact levels in the patient's quality of life. These patients end up staying at home, depriving themselves of recreational or leisure activities, due to facing some kind of prejudice. (Brito et al., 2017)

The diagnosis of bowel incontinence is of utmost importance due to the significant impact it can have on the patient's self-esteem and quality of life. Incontinence can cause embarrassment, social isolation, and even depression, affecting levels of emotional and psychological well-being of the individual. In addition, it can interfere with daily activities and participation in social events, harming social and professional life.

Risk of infection is a crucial diagnosis for HIV patients due to their immunosuppression. They are more vulnerable to serious and fatal infections due to the decreased ability of the immune system.

The diagnosis of Ineffective Sexuality Pattern is extremely important for HIV patients due to several issues related to the sexual health and quality of life of these individuals. Changes in sexual behavior can arise due to factors such as the stigma associated with HIV, fear of transmitting the virus, physical changes related to health, among others. With this it is very important to provide these patients with emotional support, sex education and guidance on strategies for a healthy and guaranteed sexuality. This helps to improve self-esteem, reduce stigma, and foster safe and positive relationships for these patients.



The diagnosis of "Compromised Human Dignity Risk" is critical for HIV patients due to the stigmatization associated with the disease. Addressing this diagnosis is essential to promote respect for the patient's dignity, involve the family in emotional support, help in decision-making and offer guidance on the health system, promote the preservation of the dignity and well-being of patients with HIV.

## **FINAL CONSIDERATIONS**

In summary, this study highlights the need for a comprehensive and specialized approach to nursing care, especially in cases involving complex diagnoses. The application of the nursing process, combined with the systematization of care, allows for an effective and personalized management of patient care, as highlighted by Mendes and Bastos (2003).

Interdisciplinary collaboration emerges as a fundamental pillar in this context, with nurses playing a central role. This professional not only coordinates and implements individualized care plans, but also provides well-being, comfort, and emotional support to the patient and their families.

The importance of a systematized and humanized approach in nursing care is undeniable, as it focuses on promoting the patient's health, rehabilitation, and quality of life. The commitment of the healthcare team and cooperation among professionals are essential to achieving positive and meaningful results, reflecting an unwavering commitment to patient well-being and excellence in nursing practice.

Therefore, it is essential that health teams continue to invest in the training and practice of care that prioritizes humanization and systematization, ensuring that each patient receives the comprehensive care they deserve.



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