

# Ineffective health control: concept analysis

*Controle ineficaz da saúde: análise de conceito*

*Gestión ineficaz de la salud: análisis de concepto*

**Wenysson Noieto dos Santos<sup>I</sup>**

ORCID: 0000-0002-2093-5415

**Rudval Souza da Silva<sup>II</sup>**

ORCID: 0000-0002-7991-8804

**Francisca Marta de Lima Costa Souza<sup>I</sup>**

ORCID: 0000-0002-2442-9499

**Rebecca Stefany da Costa Santos<sup>III</sup>**

ORCID: 0000-0002-1191-0232

**Izaque Cavalcanti de Oliveira<sup>IV</sup>**

ORCID: 0000-0002-1756-6495

**Richardson Augusto Rosendo da Silva<sup>I</sup>**

ORCID: 0000-0001-6290-9365

<sup>I</sup>Universidade Federal do Rio Grande do Norte. Natal,  
Rio Grande do Norte, Brazil.

<sup>II</sup>Universidade do Estado da Bahia. Senhor do Bonfim,  
Bahia, Brazil.

<sup>III</sup>Universidade do Estado do Rio Grande do Norte. Mossoró,  
Rio Grande do Norte, Brazil.

<sup>IV</sup>Centro Universitário Facex. Natal, Rio Grande do Norte, Brazil.

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## Corresponding author:

Wenysson Noieto dos Santos  
E-mail: [wenysson-noieto@hotmail.com](mailto:wenysson-noieto@hotmail.com)



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ASSOCIATE EDITOR: Elucir Gir

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## ABSTRACT

**Objectives:** to identify and synthesize the concept of Ineffective Health Control. **Methods:** it is Concept Analysis from the perspective of Walker and Avant, operationalized by an integrative review in the databases Scopus, LILACS, PubMed, CINAHL, *Web of Science*, Science Direct e Cochrane, using the descriptors: Adhesion to Medication; Cooperation and Adherence to Treatment and Acquired Immunodeficiency Syndrome. **Results:** five critical attributes were identified for the concept, namely: patient's refusal to follow the therapeutic plan; abandoning treatment and worsening signs and symptoms; difficulty in reaching agreed goals; difficulty following health professionals' guidelines; multifactorial and dynamic process. **Conclusions:** the concept of Ineffective Health Control is characterized by a multifactorial and dynamic process evidenced by the patient's refusal to follow a therapeutic plan, favouring the abandonment of treatment and resulting in the worsening of signs and symptoms and failure to reach goals. **Descriptors:** Nursing Diagnosis; Cooperation and Adherence to Treatment; Concept Formation; Adhesion to Medication; Acquired Immunodeficiency Syndrome.

## RESUMO

**Objetivos:** identificar e sintetizar o conceito de Controle Ineficaz da Saúde. **Métodos:** estudo de Análise de Conceito na perspectiva de Walker e Avant, desenvolvido a partir de uma revisão integrativa utilizando-se das bases de dados Scopus, LILACS, PubMed, CINAHL, *Web of Science*, Science Direct e Cochrane, com os descritores: Adesão à Medicação; Cooperação e Adesão ao Tratamento e Síndrome de Imunodeficiência Adquirida. **Resultados:** foram identificados cinco atributos críticos para o conceito, a saber: recusa do paciente em seguir o plano terapêutico; abandono do tratamento e agravamento de sinais e sintomas; difícil, dada para alcançar metas pactuadas; dificuldade em seguir as orientações dos profissionais de saúde; processo multifatorial e dinâmico. **Conclusões:** o conceito Controle Ineficaz da Saúde se caracteriza por um processo multifatorial e dinâmico evidenciado pela recusa do paciente em seguir plano terapêutico, favorecendo o abandono do tratamento e tendo como consequências o agravamento de sinais e sintomas e não alcance das metas.

**Descritores:** Diagnóstico de Enfermagem; Cooperação e Adesão ao Tratamento; Formação de Conceito; Adesão à Medicação; Síndrome de Imunodeficiência Adquirida.

## RESUMEN

**Objetivos:** identificar y sintetizar el concepto de Gestión Ineficaz de la Salud. **Métodos:** se trata de Análisis de Concepto en la perspectiva de Walker y Avant, operacionalizada por una revisión integrativa en las bases de datos Scopus, LILACS, PubMed, CINAHL, *Web of Science*, Science Direct e Cochrane, con los descriptores: Adherencia a la medicación; Cooperación y adherencia al tratamiento; y síndrome de inmunodeficiencia adquirida. **Resultados:** han sido identificados cinco atributos críticos para el concepto, a saber: recusa del paciente en seguir el plan terapéutico; el abandono del tratamiento y la agravación de señales y síntomas; la dificultad para alcanzar metas pactadas; la dificultad en seguir las orientaciones de los profesionales de salud; el proceso multifactorial y dinámico. **Conclusiones:** el concepto Gestión Ineficaz de la Salud se caracteriza por un proceso multifactorial y dinámico evidenciado por la recusa del paciente en seguir el plan terapéutico, favoreciendo el abandono del tratamiento y teniendo como consecuencias la agravación de señales y síntomas y no alcance de las metas. **Descriptor:** Diagnóstico de Enfermería; Cooperación y Adhesión al Tratamiento; Formación de Concepto; Adhesión a la Medicación; Síndrome de Inmunodeficiencia Adquirida.

## INTRODUCTION

The acquired immunodeficiency syndrome (AIDS) corresponds to the most advanced phase of infection by the human immunodeficiency virus (HIV). Since its discovery, it presents itself as a global challenge related to epidemiological, sociocultural, family, economic and clinical aspects, characterizing the need to implement policies to face social and structural barriers for diagnosis and interventions, as well as discrimination and stigma associated with people living with HIV/AIDS (PLWHA). Worldwide, it is estimated that 37.9 million people live with the virus. In Brazil, from the beginning of the epidemic, from 1980 to June 2019, the number of diagnosed cases is 966,058, with an annual record of an average of 39 thousand new cases in the last five years<sup>(1)</sup>.

It is known that AIDS imposes changes in lifestyle, which are related to the beliefs and behaviors learned and incorporated by people in social life. Therefore, it is undeniable that the health control of PLWHA is not limited only to the approach of the sick body, it is also necessary to consider life experience and subjectivity as essential aspects in the process of becoming ill and taking care of oneself.

The diagnosis of "Ineffective Health Control" is present in NANDA-I Taxonomy II in Domain 1 - Health Promotion, Class 2 - Health Control. It is defined as "Standard of regulation and integration into the daily life of a therapeutic regimen for disease treatment and its aftermath which is unsatisfactory to achieve specific health goals"<sup>(2)</sup>. However, it is clear that there are gaps regarding its defining characteristics in relation to the PLWHA population.

Thus, the professionals involved in assisting PLWHA, especially nurses, need to understand that the interventions are complex and aim to favor the patient's self-control of health. It is important that nurses make sure that the patient understands the information received and how much it takes into account, promoting ways to raise awareness regarding the positive results of treatment in order to avoid ineffective health control. In this context, the nurse must use cognitive ability, their scientific knowledge, clinical reasoning and practical experience to assess the clinical manifestations presented by the individual, identifying the Nursing Diagnoses (ND) in order to direct nursing interventions for adequate assistance.

To this end, concept analysis was used as a methodological resource that aims to examine the basic elements of a concept, assist in the definition of obscure concepts, in addition to allowing the construction of hypotheses that accurately reflect the relationships between the concepts. Although the diagnoses proposed by NANDA-I are well recognized and applied in several clinical settings, it is understood that there are limitations in their definition in specific areas (eg, PLWHA), which justifies developing studies in search of accuracy. diagnosis and conceptual refinement to define appropriate nursing interventions; furthermore, it becomes possible to bring visibility to nursing as a science.

With that, the need arose to know new clinical indicators for the nursing diagnosis "Ineffective Health Control", applied to PLWHAs, through the following questions: What are the clinical indicators that characterize Ineffective Health Control in people living with AIDS? What are the factors that precede Ineffective

Health Control and its consequences in people living with AIDS?

Thus, it is essential to clarify new clinical indicators that provide greater evidence and theoretical support to assist the nursing practice directed to the diagnosis Ineffective Health Control in PLWHA.

## OBJECTIVES

To identify and synthesize the concept of Ineffective Health Control.

## METHODS

### Ethical aspects

In the present study, we used the literature available in databases. Thus, there was no need for an appraisal by an Ethics and Research Committee, understanding that it is material in the public domain and that does not directly involve human beings.

### Study type

Concept Analysis study, following the theoretical and methodological framework of Walker and Avant<sup>(3)</sup>, which comprises eight stages, namely: selection of the concept; determination of the objectives of the conceptual analysis; identification of possible uses of the concept; determination of defining attributes; identification of a model case; identification of additional cases; identification of the antecedents and consequences of the concept; and definition of empirical references<sup>(4)</sup>. The analysis was made operational through an integrative literature review according to Whitemore and Knalf<sup>(5)</sup>, which allowed the systematization of the knowledge produced on the studied concept.

The steps consisted of identifying the research question, searching the databases, evaluation, analysis of results, analyzing the results and presenting the review in order to support the conceptual analysis. For this stage of the review, the following research questions were elaborated: What are the clinical indicators that characterize Ineffective Health Control in the population at risk of PLWHA? What are the antecedents (related factors) and respective consequences (defining characteristics) of Ineffective Health Control?<sup>(4)</sup>

### Data collection and organization

The search was carried out by the researcher from January to March 2018, through access to the CAPES portal in the following databases: Scopus, Web of Science, Cumulative Index to Nursing & Allied Health Literature (CINAHL), National Library of Medicine and National Institutes of Health (PubMed), Science Direct, Cochrane and Latin American and Caribbean Literature in Health Sciences (LILACS).

The search was carried out in an uncontrolled way, using descriptors indexed in the MeSH (Medical Subject Headings) and DeCS (Health Sciences Descriptors), in Portuguese, English and Spanish: Adherence to Medication, Cooperation and Adherence to Treatment, Acquired Immunodeficiency Syndrome, with the

following crossings on all bases: Adherence to Medication AND Cooperation and Adherence to Treatment; Acquired Immunodeficiency Syndrome AND Cooperation and Adherence to Treatment; Adherence to Medication AND Acquired Immunodeficiency Syndrome. The Boolean AND operator was used. The crossings were carried out equally in all databases.

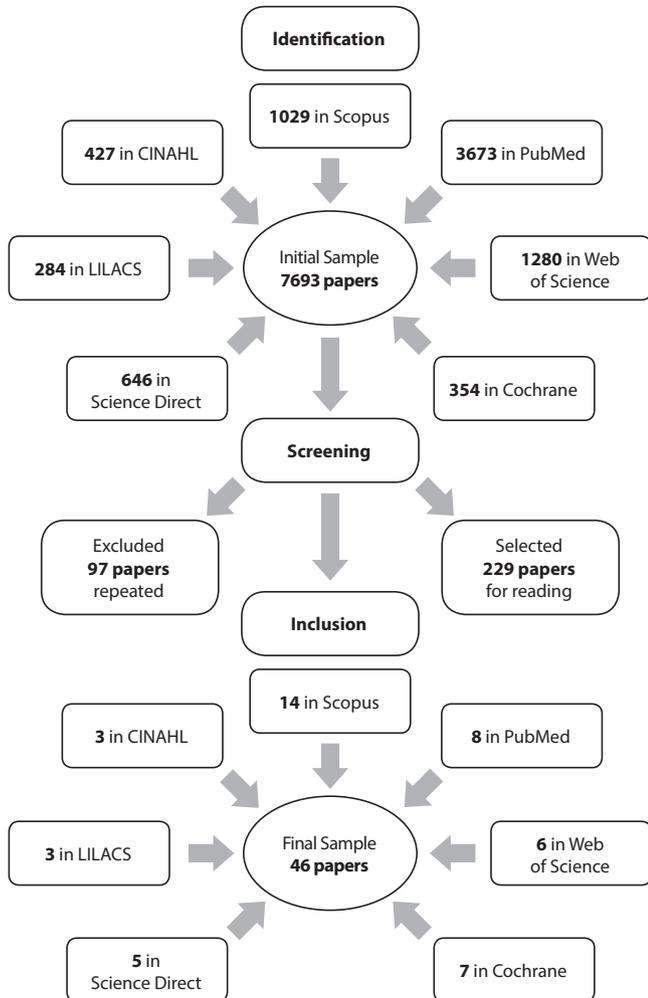


Figure 1 – Flowchart of the article selection process<sup>(4)</sup>, Brazil, 2020

The initial sample consisted of 7,693 articles as shown in Figure 1. Then, the selection criteria were applied to refine the search, namely: articles available in full, in Portuguese, English or Spanish and studies that answer the guiding questions. And the exclusion criteria: preliminary notes, protocols, ongoing research, reviews, editorials and letters to the editor. As it is a concept analysis that seeks to apprehend scientific evidence regarding the definitions and concepts about the studied phenomenon, the inclusion of studies of systematic reviews was admitted, considering that their exclusion could cause a significant reduction of significant information.

After applying the established criteria, the articles were subjected to reading the title and abstract for the selection of the first sample (n = 229). Then, to confirm the presence of the elements that supported the concept analysis, this sample was read in its entirety, so that it resulted in a final sample of 46 articles.

## RESULTS

In relation to the 46 selected studies on the concept of Ineffective Health Control, the field of action that most prevailed was that of medicine (52.2%), followed by nursing (17.4%), public health (15.2%), multidisciplinary (10.9%) and biological sciences (4.3%). Regarding the design of the studies, there was a predominance of descriptive (76.1%), followed by cohort or case control studies (15.2%), randomized clinical trials (6.5%) and, to a lesser extent, reviews systematic (2.2%). Most studies involved the adult population (95.6%), followed by adolescents (2.2%) and children (2.2%). Chart 1 presents the synthesis of the studies.

Chart 1 – Summary of studies included in the integrative review phase (N = 46)<sup>(4)</sup>, 2020

Studies	Year/Country/ Database/Area	Type of Study / Level of Evidence (LE)	Concept attributes
E1 <sup>(6)</sup>	2018/Ghana/ Scopus/I	Descriptive LE = 6	Difficulty in reaching goals agreed between the person and the health professional
E2 <sup>(7)</sup>	2018/Ethiopia/ Scopus/II	Longitudinal cohort LE = 3	Patient's refusal to follow the therapeutic plan
E3 <sup>(8)</sup>	2017/Swaziland/ Scopus/I	Descriptive LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms
E4 <sup>(9)</sup>	2017/India/ PubMed/I	Cross sectional LE = 6	Patient's refusal to follow the therapeutic plan
E5 <sup>(10)</sup>	2017/South Africa /PubMed/II	Descriptive study LE = 6	Patient's refusal to follow the therapeutic plan
E6 <sup>(11)</sup>	2017/United Kingdom/ Cochrane/I	Systematic review LE = 1	Abandonment of treatment leading to ineffective results and worsening of symptoms
E7 <sup>(12)</sup>	2017/Zambia/ Scopus/III	Cross sectional LE = 6	Difficulty in reaching goals agreed between the person and the health professional
E8 <sup>(13)</sup>	2017/Uganda/ Scopus/II	Descriptive LE = 6	Patient's refusal to follow the therapeutic plan
E9 <sup>(14)</sup>	2016/Burkina Faso/Scopus/II	Cross sectional LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms
E10 <sup>(15)</sup>	2016/ Netherlands/ PubMed/II	Cross sectional LE = 6	Difficulty in reaching goals agreed between the person and the health professional
E11 <sup>(16)</sup>	2016/USA/ PubMed/II	Descriptive LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms
E12 <sup>(17)</sup>	2015/Vietnam/ PubMed/III	Cross sectional LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms

To be continued

Chart 1

Studies	Year/Country/ Database/Area	Type of Study / Level of Evidence (LE)	Concept attributes
E13 <sup>(18)</sup>	2015/USA/ PubMed/II	RCT* LE = 2	Difficulty in reaching goals agreed between the person and the health professional
E14 <sup>(19)</sup>	2015/South Africa/PubMed/III	Descriptive LE = 6	Difficulty in reaching goals agreed between the person and the health professional
E15 <sup>(20)</sup>	2015/Australia/ PubMed/IV	Descriptive LE = 6	Difficulty in reaching goals agreed between the person and the health professional
E16 <sup>(21)</sup>	2015/USA/ Scopus/V	Cross sectional LE = 6	Patient's refusal to follow the therapeutic plan
E17 <sup>(22)</sup>	2014/Tanzania/ Scopus/V	Cohort LE = 3	Abandonment of treatment leading to ineffective results and worsening of symptoms
E18 <sup>(23)</sup>	2014/Brazil/ LILACS/II	Cross sectional LE = 6	Patient's refusal to follow the therapeutic plan
E19 <sup>(24)</sup>	2017/Brazil/ Scopus/II	Cross sectional LE = 6	Patient's refusal to follow the therapeutic plan
E20 <sup>(25)</sup>	2016/Brazil/ LILACS/IV	Cross sectional LE = 6	Patient's refusal to follow the therapeutic plan
E21 <sup>(26)</sup>	2017/USA/Web of Science/II	Cross sectional LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms
E22 <sup>(27)</sup>	2017/Ethiopia/ Web of Science/II	Cohort LE = 3	Patient's refusal to follow the therapeutic plan
E23 <sup>(28)</sup>	2017/Nigeria/ Web of Science/II	Descriptive LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms
E24 <sup>(29)</sup>	2018/USA/Web of Science/II	Cross sectional LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms
E25 <sup>(30)</sup>	2017/Uganda/ Web of Science/IV	Cross sectional LE = 6	Difficulty following the guidelines of health professionals
E26 <sup>(31)</sup>	2017/USA/Web of Science/IV	RCT* LE = 2	Patient's refusal to follow the therapeutic plan
E27 <sup>(32)</sup>	2017/China/ Scopus/II	RCT* LE = 2	Patient's refusal to follow the therapeutic plan
E28 <sup>(33)</sup>	2017/Australia/ Cochrane/II	Systematic review LE = 1	Multifactorial and dynamic process that determines ineffective health control
E29 <sup>(34)</sup>	2016/South Africa/Scopus/II	Cohort LE = 3	Patient's refusal to follow the therapeutic plan
E30 <sup>(35)</sup>	2016/Zambia/ Scopus/II	Cross sectional LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms

To be continued

Chart 1 (concluded)

Studies	Year/Country/ Database/Area	Type of Study / Level of Evidence (LE)	Concept attributes
E31 <sup>(36)</sup>	2016/Tanzania/ Scopus/II	Descriptive LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms
E32 <sup>(37)</sup>	2016/ Mozambique/ Science Direct/I	Descriptive LE = 6	Difficulty following the guidelines of health professionals
E33 <sup>(38)</sup>	2016/USA/ Scopus/II	Cross sectional LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms
E34 <sup>(39)</sup>	2017/USA/ Cochrane/II	Systematic review LE = 1	Abandonment of treatment leading to ineffective results and worsening of symptoms
E35 <sup>(40)</sup>	2014/USA/ Science Direct/II	Cohort LE = 3	Patient's refusal to follow the therapeutic plan
E36 <sup>(41)</sup>	2014/Namibia/ Science Direct/I	Descriptive LE = 6	Patient's refusal to follow the therapeutic plan
E37 <sup>(42)</sup>	2015/Brazil/ Science Direct/IV	Cross sectional LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms
E38 <sup>(43)</sup>	2018/Australia/ Science Direct/II	Cross sectional LE = 6	Difficulty following the guidelines of health professionals
E39 <sup>(44)</sup>	2016/Australia/ Cochrane/II	Systematic review LE = 1	Abandonment of treatment leading to ineffective results and worsening of symptoms
E40 <sup>(45)</sup>	2014/Nigeria/ PubMed/I	Descriptive LE = 6	Difficulty following the guidelines of health professionals
E41 <sup>(46)</sup>	2017/Malawi/ Cinahl/I	Descriptive LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms
E42 <sup>(47)</sup>	2016/Lesotho/ PubMed/I	Descriptive LE = 6	Difficulty following the guidelines of health professionals
E43 <sup>(48)</sup>	2015/Kenya/ PubMed/III	Descriptive LE = 6	Abandonment of treatment leading to ineffective results and worsening of symptoms
E44 <sup>(49)</sup>	2013/Tanzania/ Cinahl/II	Cohort LE = 3	Abandonment of treatment leading to ineffective results and worsening of symptoms
E45 <sup>(50)</sup>	2014/ Dominican Republic / Cinahl/II	Cohort LE = 3	Abandonment of treatment leading to ineffective results and worsening of symptoms
E46 <sup>(51)</sup>	2013/Brazil/ LILACS/I	Descriptive LE = 6	Difficulty following the guidelines of health professionals

Note: Area I - nursing; II - medicine; III - multidisciplinary, IV - public health and V - biological sciences. \* RCT - Randomized Clinical Trial.

### Critical attributes

Attributes are components that define the concept, that is, characteristics that will determine ineffective health control in people living with AIDS. For PLWHA, their needs go beyond treating the disease and involve an entire emotional and social context that permeates the difficulties in dealing daily with situations such as depressive symptoms, stigma, discrimination, a reframing of their life history, in addition to adverse effects related to the therapeutic regimen. From the analysis, it was possible to identify five critical attributes<sup>(4)</sup>: patient's refusal to follow the therapeutic plan<sup>(7,9-10,13,21,23-25,27,31-32,34,37,40-41,45-46,49,51)</sup>; abandonment of treatment leading to ineffective results and worsening of symptoms<sup>(8,11,14,16-17,22,26,28-29,35-36,38-39,42,44,46,48-50)</sup>; difficulty in reaching goals agreed between the person and the health professional<sup>(6,12,15,18-20,37,43,51)</sup>; difficulty following the guidelines of

health professionals<sup>(30,44-45,47)</sup>; multifactorial and dynamic process that determines ineffective health control<sup>(33)</sup>.

### Background and consequences

The antecedents are events commonly occurred before the identification of the phenomenon and contribute to its consolidation. Consequences are identified or even predicted when there is a conjunction of factors of different natures in the presence of the phenomenon, once developed and not treated<sup>(4)</sup>. Thus, according to the terminology adopted by NANDA-I, the antecedents are characterized as the etiological factors; and the consequent ones, as defining characteristics.

The antecedents of the concept are shown in Chart 2 and its consequences in Chart 3, in association with related factors and defining characteristics, respectively, both expressed in the NANDA-I taxonomy with reference to the diagnosis "Ineffective Health Control".

**Chart 2** – Background to Ineffective Health Control in People Living with AIDS<sup>(4)</sup>, 2020

Background	Related factors (NANDA- I)
Alcohol use <sup>(9,21,25,31,33-34,40)</sup>	NM
Side effects to medications <sup>(7,11,14,17-18,22,45)</sup>	NM
Depression <sup>(9,14,16,24,32-33,49)</sup>	NM
Use of illicit drugs <sup>(17,21,23,25,31,33)</sup>	NM
Stigma <sup>(8-9,11,20,50)</sup>	NM
Low education level <sup>(8,14-15,31,33)</sup>	NM
Anxiety <sup>(16-17,24,32-33)</sup>	NM
Financial difficulties <sup>(8,20,26,31,43)</sup>	Perceived barrier
Difficulty of adequate access to care <sup>(7-8,12,20,33)</sup>	Perceived barrier
Lack of social support <sup>(7,15-16,41,49)</sup>	Insufficient social support
Forgetfulness <sup>(7,9,11,18)</sup>	NM
Fear of revealing the disease <sup>(7,9,28)</sup>	NM
Many medicines to take <sup>(18-19,51)</sup>	Difficulty controlling a complex treatment regimen
Beliefs of mixing alcohol and medication <sup>(9-10,21)</sup>	NM
Being away from home or traveling <sup>(11,18,50)</sup>	NM
Religious beliefs incompatible with the therapeutic plan <sup>(22,28,45)</sup>	NM
Lack of support from partner and family <sup>(30,45-46)</sup>	Insufficient social support
Unpleasant taste of medicines <sup>(45,51)</sup>	NM
Lack of medication at home <sup>(6-7)</sup>	NM
Denial of the disease <sup>(8,19)</sup>	NM
Violence from partners and family members <sup>(35-36)</sup>	Family conflict
Dissatisfaction with care <sup>(10-11)</sup>	NM
Secret use of treatment <sup>(14)</sup>	NM
Lack of hope for the future <sup>(45)</sup>	NM
Age below 40 years <sup>(23)</sup>	NM
Blame <sup>(8)</sup>	NM
Change in routine that makes it difficult to implement the regime <sup>(18)</sup>	Difficulty moving through complex care systems
Barriers between customer and provider <sup>(19)</sup>	Perceived barrier
Difficulty understanding the health team's guidelines <sup>(30)</sup>	Insufficient knowledge about the therapeutic regimen
Lack of expectations for clinical improvement <sup>(14)</sup>	Feeling of helplessness
Lack of scheduled appointments <sup>(42)</sup>	NM
Negative health beliefs incompatible with the plan <sup>(46)</sup>	Decision conflict
Discrimination <sup>(11)</sup>	NM
Less patient involvement in treatment due to the service's low credibility <sup>(48)</sup>	NM

Note: NM – No match.

**Chart 3** – Consequences of Ineffective Health Control in People Living with AIDS<sup>(4)</sup>, 2020

Consequences	Defining characteristics (NANDA-I)
Inefficient decisions to achieve treatment goals <sup>(21,25,31,34)</sup>	Ineffective choices in daily life to achieve health goals
Complications associated with the development of the disease <sup>(13,29,39,44)</sup>	NM
Neurological and cognitive disorders <sup>(13,29,39,44)</sup>	NM
Cardiovascular disorders <sup>(13,29,39,44)</sup>	NM
Coloproctological manifestations <sup>(13,29,39,44)</sup>	NM
Periodontal changes <sup>(13,29,39,44)</sup>	NM
Ocular manifestations <sup>(13,29,39,44)</sup>	NM
Renal disorders <sup>(13,29,39,44)</sup>	NM
Neoplasms <sup>(13,29,39,44)</sup>	NM
Opportunistic infections <sup>(8,14)</sup>	NM
Tuberculosis / HIV co-infection <sup>(8,14)</sup>	NM
Failure in the practice of reducing risk factors <sup>(6-7)</sup>	Failure to act to reduce risk factors
Failure to incorporate treatment into daily life <sup>(6-7)</sup>	Failure to include the treatment regimen in daily life
Development of minor mental disorders <sup>(27)</sup>	NM
Memory deficits <sup>(38)</sup>	NM
Conduct of ineffective health control <sup>(41)</sup>	NM
Difficulty understanding the therapeutic plan <sup>(41)</sup>	Difficulty with the prescribed regimen

Note: NM – No match.

### Identification of empirical references

This step sought to determine the empirical references for the attributes, considered classes or categories of real phenomena that, by their existence, demonstrate the occurrence of the concept. Thus, the following empirical references were identified: interview scripts<sup>(6,8,10,13,16,19-20,22,26,31,36,41,44,50)</sup>, questionnaires<sup>(9,14-15,23,25,29,43,48)</sup>, Questionnaire to Evaluate the Adherence to HIV Therapy (CEAT-VIH)<sup>(17-18,24,32,38,45,51)</sup>, focus groups<sup>(30,46-47)</sup>, pharmacy information from the health service<sup>(31,33,42)</sup>, medication count<sup>(21,40)</sup>, phone calls<sup>(34)</sup>, and patient self-assessment<sup>(12)</sup>.

### Identification of the model case and the additional case

In order to exemplify the use of the concept, a clinical case of the model type was created with the defining attributes and an additional case of the opposite type, opposing the concept.

Model case<sup>(4)</sup>: A.G.L, 30 years old, male, studied up to the 5th grade of elementary school. He does not use the medication correctly due to forgetfulness; he has had side effects such as dizziness, nausea and vomiting. Alcohol and drug user. Many medicines to take as well as fear of the family discovering his diagnosis, in addition to the distance from his residence to the health service, made him abandon treatment.

Otherwise<sup>(4)</sup>: D.M.G.S, 35 years old, female, married, Catholic, diagnosed with AIDS a year ago. She reports being well and has no complaints. In laboratory tests, she has an undetectable viral load, an LT-CD4 count above 500. She reports correct use of antiretrovirals, paying attention to the schedules and dose of medications. Go to the health service to get your medicine and have a good relationship with the health team.

### Identification of possible uses of the concept

During the analysis, for the concept of Ineffective Health Control in people living with AIDS, it was possible to identify two definitions.

In the field of nursing practice, the concept revealed itself as a dynamic process that involves physical, psychological and behavioral aspects, resulting in considerable difficulties for long-term monitoring<sup>(45)</sup>, and evidenced by a pattern of regulation and integration into daily life of a therapeutic regimen for the treatment of diseases and their unsatisfactory aftermath, is to achieve specific health goals<sup>(10)</sup>.

As for the field of medicine, the definition of Ineffective Health Control was shown as the abandonment of antiretroviral therapy linked to the ineffective response to treatment, being considered a failure that increases HIV-related complications<sup>(7)</sup>, including readmission for AIDS, morbidity, mortality and drug resistance with the possibility of spreading resistant viruses<sup>(33)</sup>. In addition, it causes a lower CD4 cell count, higher levels of plasma viral RNA and delayed immune recovery, with disease progression that can lead to death<sup>(23,49)</sup>.

### Proposal for the concept of Ineffective Health Control in people living with AIDS

The concept was defined as: dynamic and multifactorial process, which involves physical, psychological, behavioral and sociocultural aspects related to the difficulty in following the therapeutic plan agreed between the person/caregiver and the health professional, negatively affecting their clinical condition and quality of life, with personal, social and economic consequences for PLWHA<sup>(4)</sup>.

Thus, Figure 2 shows the representation of the studied concept, its definition, antecedents, consequences and attributes, in order to illustrate the information identified and constructed<sup>(4)</sup>.

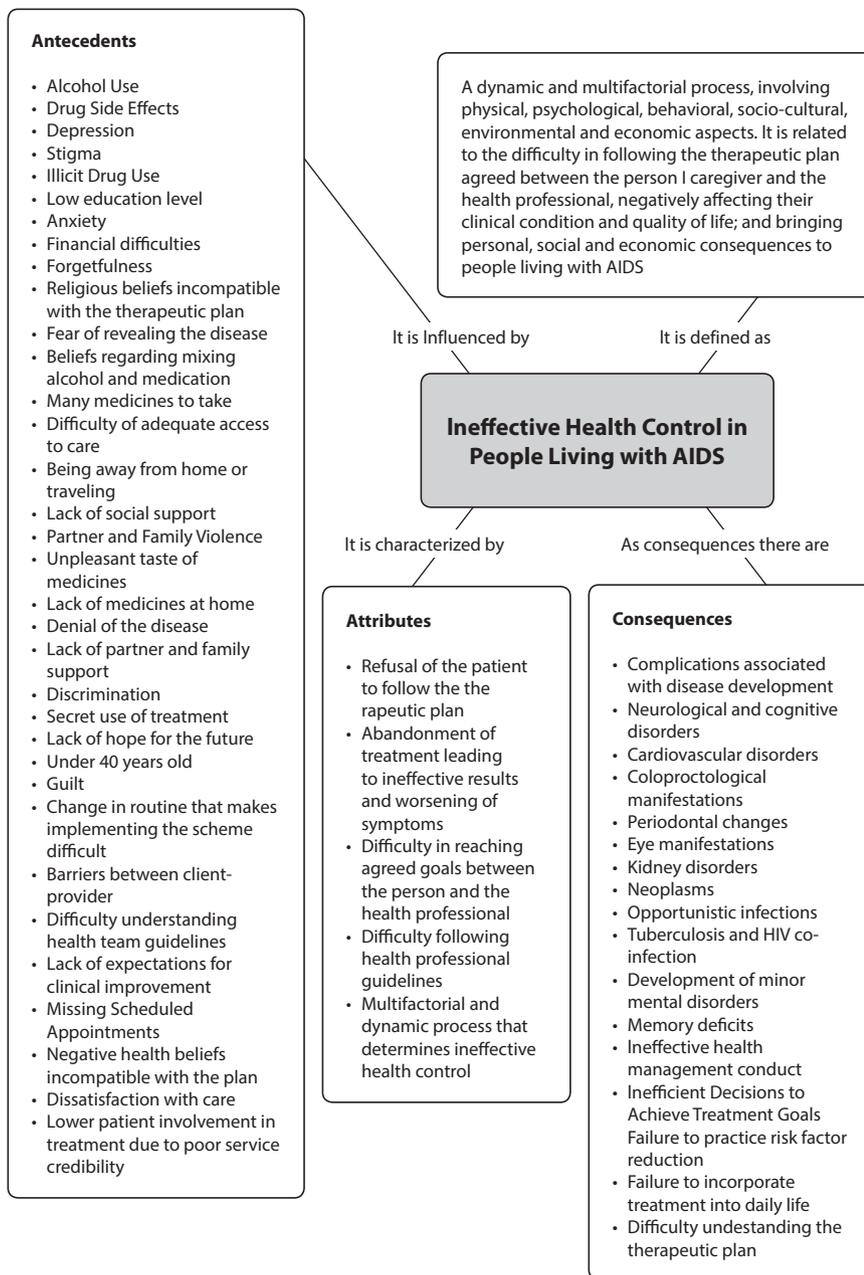


Figure 2 – Representation of the studied concept<sup>(4)</sup>, 2020

## DISCUSSION

As for the attributes, the search for an explanation about the patient's refusal to follow the therapeutic plan was the most prevalent, which can be understood as a personal attitude, in which each user makes their decision and create their own ways to manage their risks. In other studies<sup>(24)</sup>, it was possible to verify that the refusal is evidenced by the absences from the appointments and the failure to perform the requested exams, attitudes laden with obstacles such as contradictions, distance and the patient's refusal to accept the diagnosis of HIV/AIDS.

Adherence to the impaired therapeutic regimen is associated with the worsening of the clinical condition. This poor adherence is related to the complexity involved in the treatment, its long duration, several side effects, low educational level, consumption

of alcohol and other drugs. However, adherence to drug therapy is essential to suppress viral replication, preventing the emergence of opportunistic infections.

When they are able to access health services, patients are faced with rigid protocols and routines that often ignore their demands. Health professionals, in turn, are also unable to listen to or apprehend the patients' life context in order to identify other health needs, limiting themselves to focusing punctually and in a fragmented way on their complaints. Even after entering the system, there are several difficulties in making appointments, complex routine examinations and consultations with specialists. Health professionals also demonstrate their weaknesses when they recognize that their academic training does not prepare for situations involving caring for PLWHA<sup>(19)</sup>.

From the background presented in Chart 2, it can be seen that, of the 34 presented, the most prevalent were: alcohol abuse, side effects and depression. Of the total number of antecedents, only 11 are correlated with NANDA-I factors<sup>(2)</sup>.

Studies carried out in South Africa have shown that alcohol use rates per capita are among the highest in the world. There are two main reasons for explaining the association between its use and the abandonment of therapy, namely: HIV-positive individuals may frequently forget to take their medications due to the influence of alcohol; and they renounce the use of antiretroviral drugs when they drink, with the belief that alcohol and antiretroviral therapy do not mix<sup>(34)</sup>.

Regarding the difficulties in adhering to antiretroviral therapy related to side effects, research conducted in East Africa highlights that the presence of side effects has a negative influence on antiretroviral therapy and can impact various areas of the human being, from physical to psychosocial<sup>(16)</sup>, being that depression affects the individual's ability to follow treatment.

Active use of illicit drugs among PLWHA is associated with decreased access to treatment, reduced adherence and increased mortality. Those who reported drug use<sup>(23)</sup> were 2.6 times more likely to not adhere to therapy. Regarding financial problems, there is evidence that the employment and income situation is a significant factor associated with non-adherence to treatment. The interference of financial issues is related to the cost of transportation and poor access to health services due to the lack of free transportation<sup>(20)</sup>.

The lack of social support can be a contributing factor for PLWHA to increase the use of tobacco, alcohol and other drugs. Research in China shows that the chances of smoking were significantly higher among PLWHAs due to stigmatizing experiences associated with the absence of social support<sup>(15)</sup>. The fear of social judgment and the fear of discrimination silence the family, which keeps the disease a secret to protect itself. Family members find limitations and/or difficulties in care and living with PLWHA, so health professionals must take care of both the person and their family<sup>(30)</sup>.

Regarding the consequences of the analyzed concept, 17 of the highest prevalence were identified, as shown in Chart 3. Of these, only four have correspondents with the defining characteristics expressed in NANDA-I<sup>(2)</sup>. Failures in adherence and abandonment of antiretroviral therapy can occur in parallel to the abandonment of clinical follow-up, including attendance at consultations, tests and any other action related to self-care.

Another explanation for the high rate of ineffective health control centers on the condition that many patients do not understand the disease and the dynamics of drug treatment. A study on the degree of adherence points out that 1.3% of the participants had low adherence (inadequate), 66% had insufficient adherence, and 32.7%, strict adherence (adequate)<sup>(41)</sup>. Non-adherence is considered a complex and multidetermined phenomenon, associated with low socioeconomic levels, prescription of complex therapeutic schemes and dissatisfaction with the health service. Keeping the diagnosis secret is one of the factors that hinder adherence, because, for fear of being discovered, the patient stops following the treatment (visits to the doctor, taking medications, searching for medications, etc.)<sup>(28)</sup>.

Among the clinical conditions that affect people at an advanced stage of HIV infection, the most serious and most frequent are opportunistic infections. The depletion of immune cells, especially the subset of CD4 + cells, is considered a hallmark of HIV infection, as immunosuppression predisposes the individual to sexually transmitted diseases and opportunistic infections<sup>(14)</sup>.

In the case of tuberculosis (TB) patients, they require long-term treatment with various medications. And, when this diagnosis is associated with PLWHA, adherence to the therapeutic regimen becomes more difficult due to the extra burden of medication, resulting in a higher rate of default. In view of this difficulty, it is expected that new strategies are planned for monitoring the treatment<sup>(14)</sup>.

In addition, systemic complications involving the cardiovascular system increase the prevalence of this complication in PLWHA in the era of antiretroviral therapy. Study<sup>(29)</sup> points to a higher risk in 64.8% of infected men compared to 54.8% of women.

Regarding the model case and the additional, it is important to highlight them as examples to discuss the concept of Ineffective Health Control in teaching, thus contributing to critical thinking in the process of training nurses when planning care for PLWHA. It is noteworthy that, to a large extent, difficulties arise at the beginning of treatment, when greater involvement between health professionals and patients is required. Difficulties arising from adapting to medication, daily activities and representations

about treatment can be minimized with the strengthening of the bond between the parties involved and the development of qualified listening by the health professional that facilitates dialogue with the search for joint solutions and highlight co-responsibility in the treatment.

### Study limitations

A limitation of the study was to include studies considered to have a low level of scientific evidence, which occurred because it was understood that it would be necessary to cover the largest number of studies, given the need to synthesize definitions and identify different elements for analyzing the concept.

### Contributions to the field of nursing and health

It is hoped that the effective understanding of the use and application of the concept in question will allow its clarification and thus allow a better understanding of the phenomenon. In addition, the relevance of the contribution is in line with one of the United Nations Millennium Development Goals, related to the fight against HIV/AIDS, since the adherence of PLWHAs to the use of antiretrovirals reduces the transmission of the virus.

Thus, it is desired that professionals can better understand the factors that lead these patients to non-adherence to treatment and, thus, can act more effectively to reduce therapeutic failures and improve the quality of life of these people.

### CONCLUSIONS

The conceptual analysis made it possible to understand the multiple applications of the concept in different fields of knowledge, especially for nursing, so that the use of this concept in nurses' care practice can improve the planning of care for PLWHA, in addition to contributing with greater evidence for the Nursing Diagnosis present in the NANDA-I Taxonomy.

It was concluded that Ineffective Health Control in PLWHA is a multifactorial and dynamic process evidenced by the patient's refusal to follow a therapeutic plan, favoring treatment abandonment and, consequently, ineffective results, with worsening of symptoms and failure to reach agreed goals between the person and the health professional, which contributes greatly to the difficulties in following the guidelines of health professionals.

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