

#### RESEARCH! PESQUISA



# Nursing diagnoses of NANDA-I taxonomy for the elderly in a long-term institution

Diagnósticos de enfermagem da taxonomia NANDA-I para idosos em instituição de longa permanência Diagnósticos de enfermería de la taxonomía NANDA-I para ancianos en una institución a largo plazo

- Edileuza Teixeira Santana¹ 📵
- Gabriella Gonçalves Coutinho<sup>1</sup> (D
  - Daniel Vinícius Alves Silva<sup>2</sup>
- Tatielle Aparecida Almeida Bernardes<sup>1</sup>
  - Luiza Rodrigues Camisasca<sup>1</sup>
  - Ricardo Otávio Maia Gusmão<sup>3</sup>
    - Diego Dias de Araújo<sup>3</sup> (D
- Universidade Estadual de Montes Claros.
   Montes Claros, MG, Brasil.
- 2. Irmandade Nossa Senhora das Mercês de Montes Claros – Santa Casa. Montes Claros, MG, Brasil.
- Universidade Estadual de Montes Claros,
   Departamento de Enfermagem. Montes
   Claros, MG, Brasil.

#### **A**BSTRACT

Objective: To identify nursing diagnoses of the NANDA-I Taxonomy in institutionalized older adults. Method: A descriptive study, conducted with 116 older adults from a long-term institution, carried out based on the identification of nursing diagnoses of the NANDA-I Taxonomy in an instrument based on the theoretical model of Basic Human Needs and validation by experts with support in Risner's diagnosis reasoning. Results: 1,555 nursing diagnosis titles were indicated for the 116 older adults, with a mean of 13.4 diagnoses per individual. After excluding repetitions, 39 different diagnosis titles were obtained. Among them, 26 (66.7%) are titles of real diagnoses, 13 (33.3%) are titles of risk diagnoses and are classified in 8 of the 13 domains of the NANDA-I taxonomy. The most frequent nursing diagnoses were the following: risk for falls (94.8%); frail elderly syndrome (91.3%), and dysfunctional family processes (90.5%). Conclusion and implications for the practice: The profile of the nursing diagnoses identified can contribute to the increase of sensitive indicators to the nursing practice, with the planning and implementation of care measures directed to the real needs of institutionalized older adults, impacting on autonomy, independence and, consequently, on quality of life.

Keywords: Aged; Homes for the Aged; Health of the Elderly; Nursing; Nursing Diagnosis.

#### **R**ESUMO

Objetivo: identificar diagnósticos de enfermagem da Taxonomia da NANDA-I em idosos institucionalizados. Método: estudo descritivo, conduzido com 116 idosos de uma instituição de longa permanência, realizado a partir da identificação de diagnósticos de enfermagem da Taxonomia da NANDA-I em um instrumento fundamentado no modelo teórico das Necessidades Humanas Básicas e validação por especialistas com suporte no raciocínio diagnóstico de Risner. Resultados: identificaram-se 1.555 títulos de diagnósticos de enfermagem para os 116 idosos, com uma média de 13,4 diagnósticos por idoso. Após exclusão de repetições foram obtidos 39 títulos distintos de diagnósticos. Entre eles, 26 (66,7%) são títulos de diagnósticos reais, 13 (33,3%) títulos de diagnósticos de risco e estão classificados em 8 dos 13 domínios da taxonomia da NANDA-I. Os diagnósticos de enfermagem mais frequentes foram: risco de quedas (94,8%); síndrome do idoso frágil (91,3%) e processos familiares disfuncionais (90,5%). Conclusão e implicações para a prática: o perfil de diagnósticos de enfermagem identificado pode contribuir para o incremento de indicadores sensíveis à prática de enfermagem, com o planejamento e implementação de medidas assistenciais direcionadas as reais necessidades dos idosos institucionalizados impactando na autonomia, independência e consequentemente na qualidade de vida.

Palavras-chave: Idoso; Instituição de Longa Permanência para Idosos; Saúde do Idoso; Enfermagem; Diagnóstico de Enfermagem.

### RESUMEN

Objetivo: identificar diagnósticos de enfermería de la taxonomía NANDA-I en ancianos institucionalizados. **Método:** estudio descriptivo, realizado con 116 personas mayores de una residencia gerontológica, a partir de la identificación de diagnósticos de enfermería de la taxonomía NANDA-I en un instrumento basado en el modelo teórico de Necesidades Humanas Básicas y validado por especialistas con apoyo en razonamiento Diagnóstico de Risner. **Resultados:** se indicaron 1.555 títulos de diagnóstico de enfermería para los 116 p edad adultos mayores, con un promedio de 13.4 diagnósticos por adulto mayor. Excluidas las repeticiones, se obtuvieron 39 títulos de diagnóstico diferentes. Entre ellos, 26 (66.7%) son títulos de diagnósticos reales, 13 (33.3%) son títulos de diagnósticos de riesgo, y se clasifican en 8 de los 13 dominios de la taxonomía NANDA-I. Los diagnósticos de enfermería más frecuentes fueron: riesgo de caídas (94,8%); síndrome de fragilidad del anciano (91.3%) y procesos familiares disfuncionales (90.5%). **Conclusión e implicaciones para la práctica:** el perfil de los diagnósticos de enfermería identificados puede contribuir al aumento de indicadores sensibles a la práctica de enfermería, con la planificación e implementación de medidas de atención dirigidas a las necesidades reales de los ancianos institucionalizados, que impactan en la autonomía, independencia y consecuentemente calidad de vida.

Palabras clave: Anciano; Hogares para Ancianos; Salud del Anciano; Enfermería; Diagnóstico de Enfermería.

Corresponding author
Diego Dias de Araújo
diego.araujo@unimontes.br

Submitted on 04/2/2020. Accepted on 06/21/2020.

DOI:https://doi.org/10.1590/2177-9465-EAN-2020-0104

#### INTRODUCTION

Population aging is an achievement of humanity and also one of the greatest challenges to be faced by society. In the 21st century, aging will increase health, social, and economic demands worldwide.<sup>1</sup>

In 1985, the United Nations (UN) established the age of 65 or over to classify older adults in developed countries. However, in developing countries, where life expectancy is lower, as in Brazil, the age of 60 years old or more was determined, and this understanding is reinforced by the Brazilian Ministry of Health with the National Policy for the Older Adults.<sup>2</sup>

According to statistical estimates from the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*, IBGE), the Brazilian population is on an aging trajectory and, by the year 2060, the percentage of people over 60 will rise from 9.2% (today) to 25.5%. That is, one out of four Brazilians will be an older adult.<sup>3</sup>

It appears that population aging causes important socioeconomic changes, such as increased demand and the need to reorganize health services and qualified professionals to assist the older adults. Despite being a natural phenomenon, aging impacts on health status; therefore, older adults are more susceptible to frailty. Among other issues besides health, aging can result in the need to refer the older adults to a Long Term Care Institution for Older Adults (*Instituição de Longa Permanência para Idosos*, ILPI). 5

According to the National Health Surveillance Agency, ILPIs are governmental or non-governmental institutions of a residential nature designed to accommodate older adults with or without family support, in conditions of freedom, dignity, and citizenship.<sup>6,7</sup>

According to Law No. 7,498/86<sup>8</sup> and to Resolution No. 620/19 of the Federal Nursing Council (*Conselho Federal de Enfermagem*, COFEN), the exercise of Nursing was regulated throughout the national territory and the attributions of the Nursing Professionals in the ILPIs were standardized aiming at safety and at the well-being of the residents of these institutions.<sup>9</sup>

One way to provide holistic and quality care to the institutionalized older adults is through the Nursing Care Systematization (NCS) and the implementation of the Nursing Process (NP). In Brazil, such actions are regulated by COFEN Resolution No. 358/2009. 10

The NP is understood as the clinical method of the profession, a scientific practice for recognizing the health/ disease conditions that underlie Nursing care and assist in the prevention, promotion, and rehabilitation of the health of individuals, families, and communities. <sup>11</sup> It consists of five stages: nursing data collection, nursing diagnosis (ND), nursing planning, nursing implementation, and nursing evaluation. <sup>10</sup> Nursing Taxonomies can/should be used to designate NDs, results, and Nursing interventions.

Among the nursing taxonomies, *NANDA International Inc*. (NANDA-I) is a universally well-known reference that has become

a respected parameter for the identification of NDs and defines them as "clinical judgments regarding an undesirable human response to a health condition/life process that exists in a person, family, group or community". The ND is able to help reduce clinical complications and risks, in addition to contributing to evidence-based Nursing. 12

When recognizing institutionalized older adults as a vulnerable and specific group, the relevance of Nursing in the formulation of clinical and critical judgment aimed at preventing harms, promoting health, and controlling possible complications is emphasized. <sup>13</sup> In this sense, given the importance of the theme for the area of health and nursing and the population's vulnerability to the problem, there is a need to identify the care demands determined by the NDs, as these are presented as a relevant action for the clinical and scientific performance of nurses.

Given the above, the objective of this study is to identify nursing diagnoses of the NANDA-I Taxonomy in institutionalized older adults.

#### **METHOD**

This is a descriptive study, developed from June 2018 to July 2019 with older adults from an ILPI in the municipality of Montes Claros, Minas Gerais, Brazil. It is highlighted that the institution does not use standardized ND language and that this period was necessary to carry out the total data collection of institutionalized older adults.

The ILPI assists 120 older adults 24 hours a day, and has a staff of higher education employees, namely: Physician, Nurse, Physiotherapists, Dentist, Nutritionist, Physical Educator, Social Worker, and Occupational Therapist. High school level: Nursing technicians, cooks, guards, drivers, stockists, messengers, telemarketing operators, firefighter/electricians, general and administrative service clerks with a training course to care for older adults.

The universe consisted of older adults who met the following inclusion criteria: being 60 years old or older, being institutionalized at the ILPI, consenting to participate in the study or having their participation authorized by the responsible person/caregiver by signing the Free and Informed Consent Form (FICF) or the Term of Assent, respectively.

Of the total of 120 older adults, 116 participated in the study, since there were four (4) losses related to older individuals who were in hospital during the period of data collection at the ILPI.

The data collection process was developed by an undergraduate Nursing student, from the seventh semester at a public university in the state of Minas Gerais, qualified and instructed by the supervising professor. The training consisted of theoretical in-depth study of anamnesis and clinical examination, practical qualification, analysis of texts, and articles on the theme.

Data research was carried out through anamnesis and clinical examination of institutionalized older adults. The mean

duration of data collection was 1 hour. A systematic instrument developed from the literature was applied<sup>14-17</sup> consisting of sociodemographic and clinical characterization variables. It is highlighted that the data collection instrument underwent analysis and refinement by specialized professionals with experience in the area of older adults. Thus, all the proposed changes were made and the final instrument was consolidated and established by consensus.

The instrument was based on Wanda Aguiar Horta's framework, based on the Theory of Basic Human Needs (TBHN)16 as the guiding theoretical model, and was constituted by the following topics: identification and health history (gender, age, marital status, ethnicity, family income, schooling, profession/occupation, health history, current complaint, medical diagnoses, medication history, habits, and lifestyle), psychobiological needs (sleep/rest, neurological regulation, sensory perception, body care, thermo-regulation, general appearance, vascular regulation/circulation, nutrition/hydration, oxygenation/breathing, examination of the abdomen, physical activity/mobility and tissue integrity, elimination, sexuality), psychosocial (communication, social interaction, family relationship, entertainment, self-esteem, self-realization, security, knowledge about disease, treatment, and environment), and psycho-spiritual (religious beliefs, spiritual needs, and maintenance of these habits).

After the nursing consultation, the anamnesis, and the clinical examination of each older adult, the terms or expressions were analyzed and identified in fields free of the human responses at the level of well-being or that would require specific nursing interventions: health conditions, dysfunctions, conditions of vulnerability, life processes, and motivation to increase well-being. Therefore, these were the basis for identifying the NDs contained in the NANDA-I taxonomy, 2018/2020 edition.<sup>12</sup>

In order to validate the findings, the consensus validation technique<sup>18,19</sup> was used, which proposes analysis by a particular group of clinical nurses, minimum of three and maximum of five, in order to establish a consensual opinion (100%) of experts on the pertinence and relevance of a specific term/expression or ND. The disagreement of one or more specialists led to the non-validation of the respective terms/expressions or NDs.<sup>19</sup> The inclusion criteria for the specialists were the following: being a nurse, having professional performance/internship in health, with a minimum duration of two years of clinical practice assisting the older adults, author, co-author, or advisor of studies involving the health of the older adults. Four specialists were selected, considering their geographical proximity to the face-to-face meetings.

The consensus validation process took place in a municipality in the north of Minas Gerais, in which four specialists participated in two face-to-face meetings and validated the NDs guided by the systematization skills of Risner's diagnostic reasoning.<sup>20,21</sup>

It is emphasized that, based on Risner's line of reasoning, <sup>20,21</sup> it was possible to apply analytical and synthetic reasoning, considering critical thinking skills, clinical reasoning, <sup>22</sup> the nurses'

scientific knowledge and experiences in correspondence to the inferences elaborated from the elements of anamnesis and clinical examination of each older adult, and the standardized language adopted in the NANDA-I taxonomy, resulting in the NDs.

Data was added to a *Microsoft Excel* 2013 spreadsheet and a descriptive analysis was performed (simple frequencies and percentages).

This study was approved by the Research Ethics Committee of the Montes Claros State University (*Universidade Estadual de Montes Claros*, UNIMONTES) under opinion number: 2,536,218 and CAAE: 84391518.9.0000.5146, on March 9<sup>th</sup>, 2018.

#### **RESULTS**

Among the 116 older adults, 70 (60.3%) were male. Their age varied between 60 and 107 years old, with a mean of 78.2 and a standard deviation of 9.21. Older adults who declared themselves to be of a mixed-race (N=77; 66.3%) and single (N=77; 66.3%) were more prevalent and, regarding profession/occupation, there was a predominance of farmers (N=38; 32.7%) and housekeeping (N=27; 23.2%). As for the time of institutionalization and schooling, 60 (51.7%) older adults were institutionalized for 1 to 5 years and 52 (44.8%) had incomplete elementary education.

With regard to the clinical characteristics, 111 (95.6%) older adults did not have allergies, 108 (93.1%) were not alcoholics, and 92 (79.3%) were not smokers. As for medications, 49 (42.4%) used antidepressants, 46 (39.6%) anti-hypertensives, and 20 (17.2%) vasoactive drugs.

From the evaluation, 2,859 terms were identified that demonstrated changes in the basic human needs of the older adults: situations of vulnerability, dysfunctions, and life processes, in which nursing must intervene through the NP. After eliminating repetitions, 149 terms and expressions were obtained.

NANDA-I has 244 NDs classified in 13 domains of human needs<sup>(12)</sup>. 1,555 ND titles were identified for the 116 older adults, with a mean of 13.4 diagnoses per individual. After excluding repetitions, 39 distinct ND titles were obtained. Among them, 26 (66.7%) are titles of real NDs and 13 (33.3%) are titles of risk diagnoses, and are classified in 8 of the 13 domains of the NANDA-I taxonomy. It is highlighted that there was no identification of diagnosis titles in the following domains: 6. Self-perception; 8. Sexuality; 9. Stress Coping/Tolerance; 10. Life Principles, and 13. Growth/Development (Table 1).

The most frequent NDs (identified in at least 60% of the older adults) were the following: risk for falls (00155) (N=110, 94.8%); frail elderly syndrome (00257) (N=106, 91.3%); dysfunctional family processes (00063) (N=105, 90.5%); impaired memory (00131) (N=101, 87%); risk for deficient fluid volume (00028) (N=97, 83.6%); risk for constipation (00011) (N=93, 80.1%); impaired dentition (00048) (N=90, 77.5%); bathing self-care deficit (00108) (N=88, 75.8%), and dressing self-care deficit (00109) (N=79, 68.1%).

**Table 1.** Distribution of the nursing diagnosis titles identified in the older adults (N=116) in a long-term care institution for older adults, according to the NANDA-I domains. Montes Claros, Minas Gerais, Brazil, 2019.

Domain	Nursing diagnosis titles (code)	n (%)
1. Health protection	Frail elderly syndrome (00257)	106 (91.3)
2. Nutrition	Deficient fluid volume (00027)	12 (10.3)
	Risk for deficient fluid volume (00028)	97 (83.6)
	Risk for unstable blood glucose level (00179)	10 (8.6)
3. Elimination and Exchange	Constipation (00011)	16 (13.7)
	Risk for constipation (003015)	93 (80.1)
	Urge urinary incontinence (00019)	3 (2.5)
	Functional urinary incontinence (00020)	62 (53.4)
4. Activity/Rest	Decreased cardiac output (00029)	31 (26.7)
	Ineffective breathing pattern (00032)	20 (17.2)
	Impaired walking (00088)	32 (27.5)
	Insomnia (00095)	33 (28.4)
	Sleep deprivation (00096)	8 (6.8)
	Feeding self-care deficit (00102)	13 (11.2)
	Bathing self-care deficit (00108)	88 (75.8)
	Dressing self-care deficit (00109)	79 (68.1)
	Toileting self-care deficit (00110)	56 (48.2)
	Risk for decreased cardiac tissue perfusion (00200)	2 (1.7)
	Ineffective peripheral tissue perfusion (00204)	18 (15.5)
	Risk for unstable blood pressure (00267)	7 (6)
5. Perception/Cognition	Impaired verbal communication (00051)	37 (31.8)
	Acute confusion (00128)	23 (19.8)
	Chronic confusion (00129)	41 (35.3)
	Impaired memory (00131)	101 (87)
7. Roles and relationships	Dysfunctional family processes (00063)	105 (90.5)
11. Safety/Protection	Hypothermia (00006)	4 (3.4)
	Impaired tissue integrity (00044)	17 (14.6)
	Risk for impaired skin integrity (00047)	34 (29.3)
	Impaired dentition (00048)	90 (77.5)
	Risk for violence directed to others (00138)	15 (12.9)
	Risk for self-directed violence (00140)	66 (56.8)
	Risk for falls (00155)	110 (94.8)
	Risk for bleeding (00206)	1 (0.8)
	Risk for dry eye (00219)	3 (2.5)
	Risk for impaired tissue integrity (00248)	17 (14.6)
	Risk for pressure ulcer (00249)	47 (40.5)
12. Comfort	Acute pain (00132)	1 (0.8)
	Chronic pain (00133)	56 (48.2)
	Nausea (00134)	1 (0.8)

Source: Field research, 2019.

#### DISCUSSION

In an ILPI, nurses play an important role in the admission of the older adults to the institution and should insert them in the routine, and introduce them to the institution, the physical structure, the other residents, and the team of professionals. They must welcome the older adults in order to provide better and faster adaptation. Knowing the profile of the older adults, their frailties, their level of dependence, and the Nursing Diagnoses is fundamental for planning care, so that it is possible to implement a care plan in an individualized and resolutive manner, according to the needs of each older adult.<sup>21,22</sup>

From the data analysis, 39 diagnosis titles were identified. Of these, 26 (66.7%) refer to titles of real NDs and 13 (33.3%) to titles of risk diagnoses. It is emphasized that the NDs should be prioritized according to the imminent risk to life. They must be identified, and interventions must be carried out in order to avoid complications and preserve the patient's safety.<sup>23</sup>

The characterization data for the institutionalized older adults is ratified in another study that aimed to describe the sociodemographic and clinical characteristics of institutionalized older adults and found a higher prevalence of males (61.1%), single (46.3%), illiterate (46.3%) or with low schooling (22.2%).

It is emphasized that low schooling is very frequent when analyzing philanthropic institutions, as it results from the previous reality of discriminating educational opportunities for these older adults. In Brazil, the association between the socioeconomic situations, the completion of elementary and high school, and access to higher education is reflected.<sup>25</sup>

It was observed that, in the Safety/Protection domain, the most frequent diagnosis was Risk for falls (00155) (N=110, 94.8%), defined as the "increased susceptibility to falls that can cause physical harm and compromise health". 12 Studies carried out with institutionalized older adults in Fortaleza 26 and in Spain 27 corroborate this result.

Among the intrinsic characteristics, with the aging process, in the musculoskeletal changes, a reduction in muscle strength<sup>28</sup> is observed due to the relevant reduction in the size of fast-contraction muscle fibers when compared to slow-contraction fibers, which can result in negative and progressive impacts such as changes in the posture of the older adults and in the structures of the locomotor system, causing slow gait and loss of balance, aspects that lead to a greater risk of falls.<sup>29</sup>

In addition to the intrinsic aspects, the extrinsic ones also stand out, namely: slippery and/or uneven floors, absence of a support bar and protection on staircases, objects in circulation environments, very high steps, and inadequate lighting, among others that can expose the older adults to falls.<sup>30,31</sup>

In this perspective, together with the multidisciplinary team, the nurse must analyze the possible risk factors for falls, whether intrinsic or extrinsic, and thus plan and execute actions that can prevent and/or minimize the occurrence of the problem.

In the Health promotion domain, the diagnosis title of Frail elderly syndrome (00257) (N=106, 91.3%) was identified with greater prevalence, defined as "unstable dynamic state of balance

that affects the older adult who undergoes deterioration in one or more health domains (physical, functional, psychological or social) and leads to increased susceptibility to adverse health effects, disability in particular". <sup>12</sup> This finding is similar to that of another study conducted in the ILPI of Ribeirão Preto, São Paulo. <sup>32</sup> The term "frailty" is also frequently used to characterize the degree of vulnerability of the older adults to adverse outcomes, such as functional decline, falls, hospitalization, institutionalization, and death. Thus, it is a diagnosis that analyzes the physical, functional, psychological, and social factors, which allows for the identification of vulnerabilities and weaknesses in the older adults. <sup>33</sup>

The Dysfunctional family processes (00063) (N=105, 90.5%) diagnosis was found to be more frequent in the Roles and relationships domain (N=105, 90.5%) which, according to NANDA-I, defines "family functioning that fails to sustain the well-being of its members". <sup>12</sup> A study carried out in Rio de Janeiro confirms this prevalence. <sup>34</sup> Given the above, the importance of encouraging and strengthening bonds and the reinsertion of the older adults in the family environment is emphasized, making the family responsible for their care. It is also understood that the multi-professional team of the long-term institution has the function of assisting the older adults in the institutionalization process and of offering social, emotional, physical, and mental assistance. <sup>5</sup>

In the Perception/Cognition domain, Impaired memory (00051) (N=101, 87%) and Chronic confusion (00129) (N=41, 35.3%) were the most frequent ones, defined as "persistent disability of recalling or recovering parts of information or skills" and "irreversible, progressive, insidious, and prolonged change in intellect, behavior, and personality, manifested by impaired cognitive functions (memory, speech, language, decision making, and executive function) and dependence performing daily activities" respectively.

A study carried out with older adults living in the ILPI of Teresina<sup>22</sup> presented the title diagnosis of Impaired memory in 38.9% of the individuals, and Chronic confusion in 25.4%. In a study conducted in Ceará<sup>35</sup> the frequency of Impaired memory was 26%. Dementia is a pathology directly related to the aging process, determined by cognitive losses that initially interfere with memory, spatio-temporal orientation, reasoning, and judgment. In more evolved phases, it manifests a severe loss of cognitive abilities approaching total dependence.<sup>36</sup> Faced with this situation, there is a need for the ILPIs to incorporate actions that encourage the preservation of cognitive ability among measures to assist the older adults, and also to determine individualized care for the older adults with cognitive impairment.<sup>37</sup>

In the Activity/Rest domain, a higher prevalence of NDs was identified, indicating the dependence of the institutionalized older adults to perform Basic Activities of Daily Living (BADLs), such as bathing, getting dressed, intimate hygiene, and feeding. The most frequent diagnoses were Bathing self-care deficit (00108) (N=88, 75.8%), defined by "inability to complete the activities of cleaning the body independently" and Dressing self-care deficit (00109) (N=68.1%), which is "the inability to get dressed and to remove

clothes independently". <sup>12</sup> Another study conducted in the state of Bahia showed a similar finding. <sup>37</sup>

Functionality is an essential factor in the evaluation of the health-disease process of the older adults and needs to be considered in the analysis of this population's quality of life. The Instrumental Activities of Daily Living (IADLs) correspond to the more complex practices compared to the BADLs, with the former indicating greater association with social life than with individual conditions.<sup>38</sup>

The results showed that, due to the clinical profile of the institutionalized older adults, there is a diverse prevalence of NDs, mainly related to the following domains of NANDA-I: Activity/Rest and Safety/Protection. However, NDs were not elaborated in the domains of human responses: Self-perception, Sexuality, Stress Coping/Tolerance, Life Principles, and Growth/Development, a result corroborated by other studies. 13,22

The nurse is an essential professional at the ILPIs, as the aging process may generate several altered human responses specific to this population, and the identification of NDs through the application of the NP with a view to implementing the NCS enables systematic, individualized, and holistic assistance impacting on the preservation and/or increased functionality of institutionalized older adults, improving their quality of life in the aging process.

The study presents some limitations, resulting from a crosssectional study, making it impossible to investigate conditions of low prevalence, feasible in longitudinal designs. It should be noted that, due to the lack of national and international literature, it is consequently not possible to deduce that the results identified in this study are fully corresponding to the clinical reality.

## CONCLUSION AND IMPLICATIONS FOR THE PRACTICE

This study made it possible to identify 39 NANDA-I ND titles for older adult patients in an ILPI. In view of the domains, the most frequent diagnoses were the following: risk for falls, frail elderly syndrome, dysfunctional family processes, and impaired memory.

Identifying the NDs allows for the characterization of the profile of the older adult population in this institutional setting and provides a broader assessment of the health status of the older adults. Based on this identification, the planning and execution of care measures can be directed to the real needs of institutionalized older adults, optimizing nursing care, in addition to possible impacts on autonomy, independence, and increased quality of life for the older adults. The profile of NDs also contributes to the strengthening of the professional identity and of Nursing as a science.

#### **FINANCIAL SUPPORT**

Foundation for Research Support of the State of Minas Gerais (*Fundação de Amparo à Pesquisa do Estado de Minas Gerais*, FAPEMIG).

#### **AUTHOR'S CONTRIBUTIONS**

Study design and orientation. Data collection and analysis. Interpretation of the results. Writing and critical review of the manuscript. Approval of the final version of the article. Responsibility for all aspects of the content and integrity of the published article. Diego Dias de Araújo

Study design. Data analysis and interpretation of the results. Writing and critical review of the manuscript. Approval of the final version of the article. Responsibility for all aspects of the content and integrity of the published article. Ricardo Otávio Maia Gusmão

Data collection and interpretation of the results. Writing and critical review of the manuscript. Approval of the final version of the article. Responsibility for all aspects of the content and integrity of the published article. Edileuza Teixeira Santana. Gabriella Gonçalves Coutinho. Daniel Vinicius Alves Silva. Tatielle Aparecida Almeira Bernardes. Luiza Rodrigues Camisasca

#### **ASSOCIATED EDITOR**

Candida Caniçali Primo

#### **REFERENCES**

- Miranda GMD, Mendes ACG, Silva ALA. Population aging in Brazil: current and future social challengesand consequences. Rev Bras Geriatr Gerontol. 2016;19(3):507-19. http://dx.doi.org/10.1590/1809-98232016019 150140.
- Ministério da Saúde (BR), Secretaria de Atenção à Saúde. Estatuto do idoso [Internet]. Brasília: Ministério da Saúde; 2013. 70 p. [citado 23 nov 2019]. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/ estatuto\_idoso\_3edicao.pdf
- Instituto Brasileiro de Geografia Estatística. Pesquisa Nacional por Amostra de Domicílios Contínua 2012/2017: características gerais dos domicílios e dos moradores 2017 [Internet]. Rio de Janeiro: IBGE; 2018. 8 p. [citado 23 nov 2019]. Disponível em: https://biblioteca.ibge. gov.br/visualizacao/livros/liv101566\_informativo.pdf
- Alencar MA, Bruck NNS, Pereira BC, Câmara TMM, Almeida RS. Perfil dos idosos residentes em uma instituição de longa permanência. Rev Bras Geriatr Gerontol. 2012;15(4):785-96. http://dx.doi.org/10.1590/ S1809-98232012000400017.
- Alcântara RKL, Cavalcante MLSN, Fernandes BKC, Lopes VM, Leite SFP, Borges CL. Sociodemographic and health profile of institutionalized elderly people institucionalizados. J Nurs UFPE Online. 2019;13(3):674-9. https://doi.org/10.5205/1981-8963-v13i3a237384p674-679-2019.
- 6. Resolução RDC nº 283, de 26 de setembro de 2005 (BR). Regulamento técnico para o funcionamento das instituições de longa permanência para idosos. Diário Oficial da União [periódico na internet], Brasília (DF), 27 set 2005 [citado 23 nov 2019]. Disponível em: http://bvsms.saude.gov.br/bvs/saudelegis/anvisa/2005/res0283\_26\_09\_2005.html
- Vieira SKSF, Alves EMN, Fernandes MA, Martins MCC, Lago EC. Sociodemographic characteristics and morbidities among institutionalized elderly without cognitive decline. Cuidado é Fundamental. 2017;9(4):1132-8. http://dx.doi.org/10.9789/2175-5361.rpcfo.v9.5909.
- Lei n° 7.498 de 25 de junho de 1986 (BR). Dispõe sobre a regulamentação do exercício da Enfermagem e dá outras providências. Diário Oficial da União [periódico na internet], Brasília (DF), 25 jun 1986. [citado 23 nov 2019]. Disponível em: http://www.cofen.gov.br/lei-n-749886-de-25-de-junho-de-1986\_4161.html/print/
- Resolução COFEN nº 620/2019, de 4 de novembro de 2019 (BR).
   Normatiza as atribuições dos Profissionais de Enfermagem nas instituições de Longa Permanência para Idosos ILPI. Diário Oficial da União [periódico na internet], Brasília (DF), 6 nov 2019. [citado 23

- nov 2019]. Disponível em: http://www.cofen.gov.br/resolucao-cofen-no-620-2019 74957.html/print/
- 10. Resolução COFEN nº 358, de 15 de outubro de 2009 (BR). Dispõe sobre a Sistematização da Assistência de Enfermagem e a implementação do Processo de Enfermagem em ambientes, públicos ou privados, em que ocorre o cuidado profissional de Enfermagem, e dá outras providências. Diário Oficial da União [periódico na internet], Brasília (DF), 23 out 2009. [citado 23 nov 2019]. Disponível em: http://www.cofen.gov.br/resoluo-cofen-3582009\_4384.html
- Ubaldo I, Matos E, Salum NC, Girondi JBR, Shiroma LB. NANDA International nursing diagnoses in patients admitted to a medical clinic unit. Rev Rene. 2017;18(1):68-75. http://dx.doi.org/10.15253/2175-6783.2017000100010.
- Herdman TH, Kamitsuru S. NANDA International nursing diagnoses: Definitions classification, 2018-2020. New York: Theime; 2017. http://dx.doi.org/10.1055/b-006-161141.
- Souza LHR, Santana IF, Jesus SS. Capacidade funcional de idosos residentes em uma instituição de longa permanência. Acta Biomed Bras. 2017 dez;8(2):101-10. http://dx.doi.org/10.18571/acbm.144.
- Garbaccio JL, Ferreira AD. Diagnósticos de enfermagem em uma instituição de longa permanência para idosos. R. Enferm. Cent. O. Min. 2012 set/dez;2(3):303-13. http://dx.doi.org/10.19175/recom.v0i0.218.
- Freitas MC, Pereira RF, Guedes MVC. Diagnósticos de enfermagem em idosos dependentes residentes em uma instituição de longa permanência em Fortaleza-CE. Cienc Cuid Saúde. 2010;9(3):518-26. http://dx.doi.org/10.4025/cienccuidsaude.v9i3.9544.
- Horta WA. Processo de enfermagem. Rio de Janeiro: Guanabara Koogan; 2011.
- Corrêa ESM, Arrabaça MPP, Yamaguchi MU, Bernuci MP. Proposal for an instrument for the admission of the elderly to long-term care facilities: elaboration and validation. Rev Bras Geriatr Gerontol. 2019 nov;22(3):e180215. http://dx.doi.org/10.1590/1981-22562019022.180215.
- Carlson J. Consensus validation process: a standardized research method to identify and link the relevant NANDA, NIC, and NOC terms for local populations. Int J Nurs Terminol Classif [Internet]. 2006; [citado 23 nov 2019];17(1):23-4. Disponível em: https://www.ncbi.nlm.nih.gov/ pubmed/17117929
- Félix NDC, Nascimento MNR, Ramos NM, Oliveira CJ, Nóbrega MML. Specialized nursing terminology for the care of people with metabolic syndrome. Esc Anna Nery. 2020;24(3):e20190345. https://doi. org/10.1590/2177-9465-ean-2019-0345.
- Risner PB. Diagnosis: analysis and synthesis of data. In: Griffith-Kenney JW, Christensen PJ, editores. Nursing process application of theories, frameworks, and models. 2nd ed. St. Louis: Mosby; 1986. p. 124-51
- Christensen PJ, Kenney JW, editores. Nursing process: application of conceptual models. 4th ed. St. Louis: Mosby; 1995.
- Carvalho EC, Dalm C, Herdman TH. Contribuição das linguagens padronizadas para a produção do conhecimento, raciocínio clínico e prática clínica da Enfermagem. Rev Bras Enferm. 2013;66:134-41. http://dx.doi.org/10.1590/S0034-71672013000700017.
- Valcarenghi RV, Santos SSC, Hammerschmidt KSA, Barlem ELD, Gomes GC, Silva BT. Institutional actions based on nursing diagnoses for preventing falls in the elderly. Rev Rene. 2014 mar/abr; 15(2):224-32. http://dx.doi.org/10.15253/2175-6783.2014000200006.
- Bevenides KGCB, Ibiapina A S, de Souza SC, Medino YMS, Ataíde K MN. Clinical framework of elderly people in a long-term institution. J Nurs

- UFPE Online. 2019 Mar;13(3):594-603. https://doi.org/10.5205/1981-8963-v13i3a237427p594-603-2019.
- Araújo DD, Carvalho RLR, Chianca TCM. Nursing diagnoses identified in records of hospitalized elderly. Invest Educ Enferm. 2014;32(2):225-35. http://dx.doi.org/10.17533/udea.iee.v32n2a05. PMid:25230033.
- Borges CL, Silva MJ, Clares JWB, Bezerra JWB, Nogueira JM, de Freitas MC. Sociodemographic and clinical characteristics of institutionalized older adults: contributions to nursing care. Rev Enferm UERJ. 2015 jul;23(3):381-7. http://dx.doi.org/10.12957/reuerj.2015.4214.
- Cordeiro LM, Paulino JL, Bessa MEP, Borges CL, Leite SFP. Quality of life of frail and institutionalized elderly. Acta Paul Enferm. 2015;28(4):361-6. http://dx.doi.org/10.1590/1982-0194201500061.
- Pinheiro NCG, Holanda VCD, Melo LA, Medeiros AKB, Lima KC. Inequality in the characteristics of the institutionalized elderly in the city of Natal, Brazil. Cien Saude Colet. 2016 nov;21(11):3399-405. http:// dx.doi.org/10.1590/1413-812320152111.19472015. PMid:27828573.
- Fernandes BKC, Clares JWB, Borges CL, Nóbrega MML, Freitas MC. Nursing diagnoses for institutionalized elderly people based on Henderson's theory. Rev Esc Enferm USP. 2019 jun;53:e03472. http:// dx.doi.org/10.1590/s1980-220x2018004103472. PMid:31166459.
- García BP, González SM, Muñoz AMC, Antón-Solanas I, Caballero VG, Vela RJ. Risk of drug-related falls among noninstitutionalized older adults. Rev Esc Enferm USP. 2018;52:e03319. http://dx.doi.org/10.1590/ S1980-220X2017012603319. PMid:29668792.
- Tansini S, Kummer JA, Borges AM, Vidmar MF, Dal Molin V, Wibelinger LM. Influência do exercício resistido na força muscular de idosos. Lect Educ Fis Deporte [Internet]. 2014; [citado 23 nov 2019];19(192). Disponível em: https://www.efdeportes.com/efd192/exercicio-resistido-na-forca-muscular-de-idosos.htm
- Smith AA, Silva AO, Rodrigues RAP, Moreira MASP, Nogueira JA, Tura LFR. Assessment of risk of falls in elderly living at home. Rev Lat Am Enferm. 2017;25(e2754):1-9. http://dx.doi.org/10.1590/1518-8345.0671.2754. PMid:28403333.
- Chehuen JA No, Brum IV, Braga NAC, Gomes GF, Tavares PL, Silva RTC et al. Fall awareness as a determining factor of this event among elderly community residents. Geriatr Gerontol Aging. 2017;11(1):25-31. http://dx.doi.org.10.5327/Z2447-211520171600074.
- 34. Silva TG, Souza PA, Santana RF. Adequacy of nursing language to the practice with elderly residents in a long term psychiatric institution: cross mapping. Cuidado é Fundamental. 2015;7(4):3467-78. http://dx.doi.org/10.9789/2175-5361.2015.v7i4.3467-3478.
- Fluetti MT, Fhon JRS, Oliveira AP, Chiquito LMO, Marques S. The frailty syndrome in institutionalized elderly persons. Rev Bras Geriatr Gerontol. 2018;21(1):62-71. http://dx.doi.org/10.1590/1981-22562018021.170098.
- Esquenazi D, Silva SRB, Guimarães MAM. Aspectos fisiopatológicos do envelhecimento humano e quedas em idosos. Revista HUPE. 2014;13(2):11-20. http://dx.doi.org/10.12957/rhupe.2014.10124.
- Oliveira PB, Tavares DMS. Condições de saúde de idosos residentes na Instituição de Longa Permanência segundas necessidades humanas básicas. Rev Bras Enferm. 2014;67(2):241-6. PMid:24861067.
- Nascimento HG, Figueiredo AEB. Dementia, family caregivers and health service: the care of yourself and the other. Cien Saude Colet. 2019;24(4):1381-92. http://dx.doi.org/10.1590/1413-81232018244.01212019. PMid:31066840.