Nursing Diagnoses Using the International Classification for Nursing Practice (ICNP®) for Institucionalized Elderly

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Abstract

Introduction: Nursing care for institutionalized elderly should be done through systematized actions and by using the nursing process, directing the care actions to the affected needs with theoretical support and use of classification systems. In this context, the objective was to develop nursing diagnoses of the International Classification for Nursing Practice for institutionalized elderly.

Method: This is a descriptive study, developed in a Long-stay Institution for Elderly People in Northeast Brazil. The survey was conducted from April to May 2016, with 28 institutionalized elderly. Data collection was guided by a form based in Henderson's theory and carried out through physical examination, clinical interview and records consultation. The nursing diagnoses were developed by using the International Classification for Nursing Practice version 2015. Data were analyzed using SPSS version 20.0.

Results: Authors found 81 types of diagnoses, among which there was highlight to: impaired heart condition, productive cough, obesity, urinary incontinence, constipation, diarrhea, risk for falls, impaired sleep, impaired ability to perform hygiene, edema in the lower limbs and impaired vision, lack of recreational activity, positive socialization and positive religious belief. Most nursing diagnoses belonged to the needs of moving and maintaining desirable posture and communicating.

Conclusion: There was an increased frequency of diagnoses related to biological needs.

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Keywords

Nursing; Nursing Diagnosis; Elderly People; Long Stay Institution for the Elderly.

Introduction

For many years, the nursing practice has consisted of intuitive and not systematized methods, which evidences the lack of a body of expertise. Because it is a profession whose essence is the complexity of care, it requires theoretical foundation to guide the actions, ensuring the quality of care performed and achievement of expected results. [1]

Nursing, as science of caring, has a fundamental role in assisting the healthy or sick individual in the different contexts of their practice, especially in long-stay institutions for the elderly. These locations are configured in group homes that serve independent and dependent elderly in a situation of financial or family difficulties and who need long-term care. [2]

Nursing care for institutionalized elderly should be done through systematic actions, using the nursing process, directing the care actions to the affected needs with theoretical support and use of rating systems. [3]

Theories are chosen from the context and the demands of the individual. In this study, researchers chose to use the Theory of Fundamental Needs of Virginia Henderson, which considers the patient as an individual who needs help to achieve independence and autonomy. This theory proposes fourteen fundamental needs that represent the areas in which health problems can occur and must be met so that the subject maintain their physical and mental integrity. [4]

It is noticed that the practice of systematizing actions in these institutions is still incipient and little used, which may result in care provided without continuity and achievement of goals, which may compromise the health of the elderly. [5]

In this context, the development of diagnoses is crucial, a crucial step of the nursing process. For this, there is the International Classification for Nursing Practice (ICNP®), which allows the construction of nursing diagnoses, results and interventions. Its use encourages the record and the quality of care

and allows the technological and scientific development of the profession. [6, 7] In this context, the research aimed to develop nursing diagnoses using ICNP® for institutionalized elderly.

Methods

This is a descriptive, quantitative study, developed in a Long-stay Institution for the Elderly in Northeast Brazil. The survey was conducted in the period from April to May 2016, with all elderly assisted and evolved daily by medical staff, totaling 28 elderly.

Data collection was performed by means of physical examination and clinical interview guided by a form specifically designed for this study, which took into account the assumptions of the first two steps of the nursing process, namely: data collection and nursing diagnoses. The structure and application of the form provided subjective and objective information about each of the fourteen basic needs, according to Henderson's proposal, enabling the obtainment of socio-demographic data and clinical health conditions of the evaluated elderly. Furthermore, researchers consulted the records to supplement the information when needed.

After obtaining the data, these went through a diagnostic reasoning process based on Lefevre, based on five stages: 1) listing possible problems/diagnoses; 2) eliminating problems / similar diagnoses; 3) naming the potential and real problems and clarifying what is causing or contributing to them; 4) determining the risk factors that must be controlled; 5) identifying the resources, strengths and areas for health promotion. [8]

Then, the nursing diagnoses were developed according to ICNP® version 2015, [9] following the guidelines of the International Council of Nurses (ICN), established in Standard ISO 18104/14 of the International Organization for Standardization (ISO). For the preparation of statements of nursing diagnoses, authors included a the term of the axis "Focus" and "Judgment", in addition to the axes

"Customer", "Location" and "Time". [10] In some cases when authors did not found terms for the situation identified, they used terms of the literature in that area and of clinical practice to build the nursing diagnoses.

It is noteworthy that to define the degree of dependence of the elderly participants we used the classification established by the National Health Surveillance Agency, which regulates the operation of long-stay institutions for the elderly in Brazil. Thus, it was considered grade I the independent elderly (even those making use of aid equipment); grade II, the elderly who have difficulty in performing at least three activities of daily living and/or cognitive condition maintained or controlled cognitive impairment; and grade III, the elderly with difficulty to perform all the basic activities of daily living and/or cognitive impairment. [11]

For data analysis, it was built a spreadsheet in Microsoft Excel and transferred to the SPSS software version 20.0, and descriptive statistics were conducted with absolute and relative frequencies, mean and standard deviation.

The study was approved by the Ethics Research Committee of the State University of Ceará, with Protocol No. 1,476,411 and CAAE 54617616.6.0000.5534. The research procedures involving human subjects were followed in order to preserve the physical, moral and social integrity of subjects involved. [12]

Results

The average age of the elderly was $76.6 (\pm 8.56)$ years. There was prevalence of females (53.6%), single (57.1%) and 0 to 3 years of study (53.6%). The time of institutionalization was 91.2 (\pm 7.82) months. The amount of comorbidities varied from 1 to 11, with a mean of 3.82 (\pm 1.78); and the amount of medications ranged from 0 to 11, with a mean of 5.82 (\pm 2.79). Most seniors is independent (grade I of dependence) (53.6%). **(Table 1)**

Table 1. Profile of institutionalized elderly. Fortaleza. Ceara. 2016.

Cedia. 2010.		
Variables	f	%
Age	*	*
Average: 76.61 (±8.56); minimum: 63; maximum: 90	76.19	87.50
Gender		
Female	15	53.6
Male	13	46.4
Marital status		
Single	16	57.1
Widowed	07	25
Separated	03	10.7
Divorced	02	7.1
Education		
0 to 3 years of study	15	53.6
4 to 15 years of study	13	46.4
Retired		
Yes	24	85.7
No	04	14.3
Religion		
Catholic	20	71.4
Evangelical	4	14.3
Spiritualist	1	3.6
None	1	3.6
Uninformed	2	7.1
With whom they lived before institutionaliz	ation	
Alone	12	42.9
Other relatives / friends	9	32.1
Spouses and children	04	14.3
Others	03	10.7
Time of institutionalization		
5 to 59 months	10	35.7
60 to 119 months	11	39.3
120 to 264 months	07	25
Receives visit		
Yes	21	75
No	07	25
Comorbidities		
1 or 2	5	17.9
3 to 4	16	57.1
5 to 11	7	25

Variables	f	%
Medicines		
0 to 4	09	32.1
5 to 6	06	21.4
7 to 11	13	46.4
Degree of dependence		
Degree 1	15	53.6
Degree 2	05	17.9
Degree 3	08	28.6

It was found 81 types of diagnoses in 28 surveyed elderly. On diagnoses related to the biological needs, there was highlight to impaired heart condition (10.7%), productive cough (10.7%), obesity (25%), urinary incontinence (25%), constipation (10.7%), diarrhea (10.7%), risk for falls (35.7%), impaired sleep (21.4%) (Table 2), impaired ability

Table 2. Nursing diagnoses of institutionalized elderly as the basic needs of breathing; eating and drinking; eliminating; moving and maintaining desirable posture; sleeping and resting according to Virginia Henderson. Fortaleza. Ceará. 2016.

Needs and Diagnoses	f	%
Breath		
Impaired heart condition	03	10.7
Productive cough	03	10.7
Dry cough	02	7.1
Eat and drink		
Obesity	07	25
Overweight	03	10.7
Risk for malnutrition	03	10.7
Lack of apetite	03	10.7
Impaired dentition	02	7.1
Malnutrition	01	3.5
Missing dentition	01	3.5
Impaired mastication	01	3.5
Dry oral mucosa	01	3.5
Compulsive behavior	01	3.5
Excessive food intake	01	3.5
Decreased fluid intake	01	3.5

Needs and Diagnoses	f	%
Eliminate		
Urinary incontinence	07	25
Constipation	03	10.7
Risk for constipation	03	10.7
Diarrhea	03	10.7
Enuresis	03	10.7
Bowel incontinence	02	7.1
Dry stool	01	3.5
Impaired renal function	01	3.5
Movie and maintain desirable posture		
Risk for falls	10	35.7
Impaired ambulation	09	32.1
Chronic pain	03	10.7
Musculoskeletal pain	02	7.1
Arthritic pain	02	7.1
Bone pain	02	7.1
Impaired mobility	01	3.5
Impaired bed mobility	01	3.5
Fear of falling	01	3.5
Impaired physical exercise behavior	01	3.5
Sleep and rest		
Impaired sleep	06	21.4
Insomnia	01	3.5

to perform hygiene (50%), edema in the lower limbs (10.7%), and impaired vision (17.8%) (**Table 3**). On the psychological, social and spiritual needs, the diagnoses lack of recreational activity (10.7%), positive socialization (17.8%) and positive religious

Table 3. Nursing diagnoses of institutionalized elderly as the basic needs of dressing and undressing; being clean, well-groomed and protecting the integument; and avoiding dangers according to Virginia Henderson. Fortaleza. Ceará. 2016.

Needs and Diagnoses	f	%
Dress and undress		
Impaired ability to dress	13	46.4
Productive cough	03	10.7

Needs and Diagnoses	f	%
Be clean, well-groomed and protect the integument		
Impaired ability to perform hygiene	14	50
Edema in lower limbs	03	10.7
Excoriation in right knee	01	3.5
Malignant sore skin	02	7.1
Impaired body hygiene	02	7.1
Impaired oral hygiene	02	7.1
Infestation of parasites in the skin	01	3.5
Infestation of parasites in the head	01	3.5
Fungal infestation in toenails	01	3.5
Dry skin	02	7.1
Impaired peripheral tissue perfusion	01	3.5
Risk for infection	01	3.5
Venous ulcer	02	7.1
Impaired skin integrity	01	3.5
Infection	01	3.5
Avoid dangers		
Impaired vision	05	17.8
Alcohol abuse	02	7.1
Tobacco abuse	02	7.1
Cataract in the left eye	01	3.5
Impaired hearing	01	3.5
Anxiety	01	3.5
Aggressive behavior	01	3.5
Mood swings	01	3.5

belief (10.7%) **(Table 4)** stood out. The majority of nursing diagnoses belongs to the needs of moving and maintaining desirable posture (32) and communicating (28).

Table 4. Nursing diagnoses of institutionalized elderly as the basic needs to communicate, act according to one's beliefs and values; recreate; and learn of Virginia Henderson. Fortress. Ceará. 2016.

Needs and Diagnoses	f	%
Communicate		
Positive socialization	05	17.8
Impaired verbal communication	03	10.7
Positive family support	03	10.7

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Needs and Diagnoses	f	%
Aggressive behavior	03	10.7
Depressed mood	02	7.1
Effective family coping	02	7.1
Absent verbal communication	01	3.5
Impaired family coping	01	3.5
Concern about the loss of autonomy	01	3.5
Decreased socialization	01	3.5
Relationship problem	02	7.1
Positive loving relationship	02	7.1
Positive relationship	02	7.1
Act according to one's beliefs and values		
Positive religious belief	03	10.7
Risk for loneliness	01	3.5
Impaired body image	01	3.5
Concern about the treatment	01	3.5
Concern about the disease	01	3.5
Feelings of worthlessness	01	3.5
Impotency	01	3.5
Recreate		
Lack of leisure activity	03	10.7
Learn		
Non-adherence to treatment regimen	01	3.5

Discussion

Sociodemographic data of this study corroborate others when these state that older, female, single and low education elderly predominate in long-term care facilities. [5, 13] It is common that elderly people are admitted in these spaces because of dependency, disability and frailty. [14] This implies a greater quantity of comorbidities and polypharmacy. In this regard, this research agrees with the literature. [13]

On the first fundamental need of Virginia Henderson, breathing, the nursing diagnosis impaired heart condition was established as secondary to congestive heart failure (CHF). Heart failure is a progressive and irreversible complication that includes discomforting clinical symptoms as dyspnea, fatigue and edema, with great loss of quality of life, reduced survival and overload of caregivers. [6, 15] In the

elderly, this disease is debilitating and contributes to the emergence of numerous other cardiac and circulatory events, worsening of functional capacity and of comfort.

The found diagnosis productive cough could be explained by the fact that the elderly of this study are passive and active smokers and by the climatic conditions related to the temperate and hot climate of the place of residence, which favored susceptibility to acute lung diseases, often difficult to resolve. In fact, during the aging process, physiological changes occur in the lung, caused by anatomical changes and reorientation of elastic fibers. [16]

Regarding the respiratory activity, there occurs the weakening of expiratory and inspiratory muscles and change in cough reflex. [17] Furthermore, in the elderly, the reduced lung cilia and hypertrophy of mucous glands of the bronchi further complicate the ability to expel mucus and residues. These losses can result in adverse clinical events that worsen the quality of life and favor admissions.

Regarding the need to eat and drink, the following nutritional disorders were evidenced: obesity, overweight and malnutrition. The aging itself and the senior's way of life associated with sedentary lifestyle and poor eating habits can cause low functional performance, weakness, frailty, and sarcopenia. [18-19]

The nursing diagnoses of obesity and overweight have been associated with chronic diseases, of which cardiovascular diseases, diabetes mellitus and hypertension stood out. A study conducted in São Paulo, which aimed to determine the nutritional status of institutionalized elderly found the same relationship. [20]

With regard to the occurrence of malnutrition, professionals must know the main physiological aspects that influence the feeding process of the institutionalized elderly, such as possible changes of the stomatognathic system, of the functions of chewing and swallowing. [21]

Regarding the need to eliminate, urinary incontinence is more prevalent in long-stay institutions

than in the community, with the prevalence of 65.8% and 27%, respectively; [22-23] and in female seniors compared to male seniors, with a prevalence of 36.1% and 26%, respectively. [24] This is a complex problem that is on the list of "Giants of Geriatrics". It is a trivial complaint in the lives of many older people and may cause social isolation, worsening of pressure injuries, embarrassment, risk for falls and functional decline. This study does not differ from the literature, and shows how this problem is aggravating and needs strategies for prevention and treatment. There is need for awareness on how much urinary incontinence affects the quality of life of institutionalized elderly, prioritizing dignity, autonomy and good humor. [22]

Regarding intestinal disorders, the major diagnoses identified were constipation and diarrhea. Constipation is a prevalent condition in the institutionalized geriatric population. It is considered a multifactorial digestive complaint, and advanced age and low fiber intake are the most significant associated factors. In addition, other factors are assessed as aggravating to their appearance, such as physical inactivity, water intake and polypharmacy. [25]

Diarrhea is considered an indicator of the quality of care of long-stay institutions, and is monthly notified in Brazil to recording in the National Health Surveillance Agency. [11] In this environment, since it is a closed and easy contamination location, it is essential to maintain environmental hygiene, use of personal protective equipment and hand washing. However, many institutions in Brazil, have poor conditions and suffer from problems that could be easily avoided, such as diarrhea that can lead to hospitalization, dehydration and death, especially in the elderly people. Added to this fact, there are the immunological changes of the old body, which may make them more vulnerable to infections.

In this study, there were no older people diagnosed with fecal incontinence, however, the elderly person with diarrhea is seven times more likely to develop fecal incontinence, and those with urinary incontinence and dementia are twice more likely.

[26] A study in Norway showed that fecal incontinence occurred in 78% of cases of elderly patients with diarrhea. [26] Fecal incontinence can also occur in older adults with constipation. In this case, the concern is directed to fecal impaction and to iatrogenic complications that can be caused by prescription of laxative and constipating diet.

Regarding the need to move and maintain desirable posture, the risk for falls was the main diagnosis found. The risk factors for falls can be classified into two types, the intrinsic factors such as age, clinical condition, gait and balance disorder, cognitive impairment; and the extrinsic factors that are related to the architectural inadequacies such as insufficient lighting, lack of grab bars in hallways and bathrooms, etc. [27]

Exploring the associated factors, from the nursing diagnosis, and the multidimensional assessment of these risks are essential strategies for the development of preventive actions to reduce the incidence of these events in long-stay institutions for the elderly people. [28]

During aging, there occurs a reduced need of hours of sleep per day. However, this fact is often misunderstood by the elderly. In addition, changes in the standard and quality of sleep and rest and cognitive changes of the chronological age itself can have a negative impact on psychological, immunologic, performance, humor and adaptation functions. [29]

The nursing diagnosis impaired sleep should be a priority in the nursing team's actions in hospitals and institutions. This is due to environmental and comfort issues, which, in most cases, are not respected, damaging the daily life of the elderly person. The reduction of noise, brightness, environmental cleaning, invasive and non-invasive, simple or complex procedures, should be closely monitored during the provision of care, as they are decisive for the adaptation of the individual, promotion of comfort and optimization of care. Having identified the importance of sleep, the nurse can look for ways to promote good quality sleep

for their patients and educate other professionals about it. [30]

Typical changes in the aging process, such as sensory decline, cognitive loss, physical limitations and weaknesses, cause a reduction in the functional capacity of the elderly, affecting their ability to perform hygiene. [5] It is noteworthy that 50% of the elderly were diagnosed with impaired ability to perform hygiene, making them prone to dependence, needing help in care. Facing this reality, self-care should be encouraged so that there is health promotion and self-esteem, factors needed to promote the independence of the elderly. [31]

Also regarding the need to be clean, well-groomed and protect the integument, the diagnosis of edema in the lower limbs was noted in 10.7% of the elderly. This change may be related to increased sodium intake, renal dysfunction, congestive heart failure and vascular changes. [32] Nurses are responsible to perform a complete physical evaluation and the identification of predisposing factors related to this clinical condition that contributes to the decline in the functional capacity of the elderly.

The vision is a crucial sense for humans. Diabetes mellitus, visual changes associated with presbyopia and diabetic retinopathy are main characteristics of aging and its numerous comorbidities. This study corroborates the literature on the prevalence of elderly patients with decreased visual acuity; a Brazilian study found 20% of the problem in institutionalized elderly people and of these, 26.7% were using corrective lenses. [21] Loss of vision can lead to feelings of low self-esteem and dependency. So, both the nursing staff and caregivers should identify the elderly person diagnosed with impaired vision to develop strategies to facilitate communication in order to keep them active and participatory within the institutional context. [21]

To keep seniors active within the institution there is need for constant realization of activities for the preservation of physical and mental well-being. In contrast, it was identified the diagnosis of lack of recreational activities for the elderly people. So-

metimes these institutions are seen as monotonous places that do not provide to the elderly people activities that enable new experiences, enhancement of old experiences and acquired skills. [33] The long-sought free time in the institution's environment ends up becoming an empty time, making the experience devastating and idle. [34]

It was observed that elderly people who had this diagnosis had become sad and resigned for not having what to do on that place, particularly in relation to leisure activities. Resignation can be related to the need for survival since, despite not guaranteeing the leisure and comfort, these institutions guarantee essential care that many elderly need to have a more dignified aging. [35]

Nurses in the long-term care facility for seniors provide care so as not to cause damage along the adaptation process of the senior, i.e., by avoiding the reduction of autonomy, strengthening the identity and socialization, as well as the quality of life. These institutions should focus in healthy aging process by promoting activities that bring cheer and satisfaction for the elderly people. This can happen by involving the elderly in planning activities. [36] One way to assist the elderly in this adaptation process is using fun activities during the provision of care. This kind of action brings the opportunity to awaken creativity, imagination, joyful feelings and interpersonal relationships, and helps in improving the health and group relationships within the institution. [37]

Regarding the diagnosis positive religious belief, religion and spirituality are strategies that older people use in their daily lives to seek support in stressful situations related to finitude, distance from family, socioeconomic context, before the common health problems of everyday life and the institutionalization itself.38 Old age is considered by many as the final stage of life, where there is greater reflection about death, and even more, what there is beyond it. These considerations inevitably strengthen the greater religious approximation by the elderly. [39]

Many seniors in long-term care facilities have difficulty in facing the process of institutionalization, as they experience physical limitations, which hinders self-care and make them become passive subjects; confiding their health only to God and to their beliefs. [40] For older people, faith collaborates either in healing, or in control of chronic diseases and/or in improving functional capacity in activities of daily living.

Conclusions

There was a higher frequency of diagnoses related to the biological needs, followed by psychological, social and spiritual needs. The practice of systematizing nursing care actions for the institutionalized elderly is possible in the long-stay institutions and should be encouraged. Thus, it is believed that care should be focused on systematic actions base on gerontological knowledge, aiming at a healthy and active aging through disease prevention, health promotion and rehabilitation of the elderly, considering their demands revealed by nursing diagnoses

Authors emphasize the need for nursing care built on the pillars of theoretical and philosophical knowledge of the profession, involving the use of terminologies and nursing theories for an individualized and consistent care to the real needs presented by the institutionalized elderly, considering that they not only they receive care in these places, but live there, in a reality different from what they experienced until the time of institutionalization.

References

 Favero L, Pagliuca LMF, Lacerda MR. Cuidado transpessoal em enfermagem: uma análise pautada em modelo conceitual. Rev. Esc. Enferm. USP [Internet]. 2013 Apr [cited 2016 July 01]; 47(2):500-505. Available from: http://dx.doi.org/10.1590/50080-62342013000200032

- 2. Camarano AA, Kanso S. As instituições de longa permanência para idosos no Brasil. Rev. bras. estud. popul. [Internet]. 2010 [cited 2016 June 29]; 27(1):232-235. Available from: http://dx.doi.org/10.1590/S0102-30982010000100014
- **3.** Mattos CMZ, Garces SBB, Costa FTL, Rosa CB, Brunelli AV, Hansen D. Processo de Enfermagem aplicado a idosos com alzheimer que participam do projeto estratégias de reabilitação. Estud. interdiscipl. Envelhec [Internet]. 2011 Dec [cited 2016 June 20]; 16(esp.):433-447. Available from: http://www.seer.ufrgs.br/RevEnvelhecer/article/view/17921
- **4.** Henderson V. Principios fundamentales de los cuidados de enfermería. Bol Oficina Sanit Panam. 1958, 44(3): 217-220.
- 5. Oliveira JMM, Nóbrega MML, Oliveira JS. Nursing Diagnosis and Results for the Institutionalized Elderly: A Methodological Study. Online braz j nurs [Internet]. 2015 Mar [cited 2016 June 20]; 14(2):110-20. Available from: http://www.objnursing.uff.br/ index.php/nursing/article/view/5151
- **6.** Araújo AA, Nóbrega MML, Garcia TR. Nursing diagnoses and interventions for patients with congestive heart failure using the ICNP®. Rev. Esc. Enferm. USP [Internet] .2013 Apr [cited 2016 July 05]; 47(2): 385-392. Available from: http://dx.doi.org/10.1590/S0080-62342013000200016
- 7. Medeiros ACT, Nóbrega MML, Rodrigues RAP, Fernandes MGM. Nursing diagnoses for the elderly using the International Classification for Nursing Practice and the activities of living model. Rev. latinoam. enferm. [Internet]. 2013 Mar-Apr [cited 2016 May 30]; 21(2):[08 telas]. Available from: http://dx.doi.org/10.1590/S0104-11692013000200008
- **8.** Alfaro-Lefevre R. Aplicação do processo de enfermagem: fundamentos para o raciocínio clínico. Tradução: Regina Machado Garcez; Revisão técnica: Maria Augusta M. Soares, Valéria Giordani Araújo. 8ª ed. Porto Alegre: Artmed, 2014.
- 9. Conselho Internacional de Enfermeiros. Classificação Internacional para a Prática de Enfermagem- versão 2015. Tradução: Telma Ribeiro Garcia, Centre for ICNP® Research and Development of the Federal University of Paraiba [Internet]. 2015 [cited 2016 June 20] Available from: http://www.icn.ch/ images/stories/documents/pillars/Practice/icnp/translations/ icnpBrazil-Portuguese translation.pdf
- 10. International Organization for Standardization. Health informatics: Categorial structures for representation of nursing diagnoses and nursing actions in terminological systems: ISO 18104 [Internet]. 2014 [cited 2016 June 20] Available from: http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=59431
- **11.** Brasil. Agência Nacional de Vigilância Sanitária. RDC nº 283, de 26 de setembro de 2005. Regulamento técnico para o funcionamento das instituições de longa permanência para idosos. Brasília: ANVISA; 2005.
- **12.** Brasil. Ministério da Saúde. Conselho Nacional de Saúde. Resolução nº 466 de 12 de dezembro de 2012. Diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. Brasília: Ministério da Saúde, 2012.

- 13. Reis KMC, Jesus CAC. Cohort study of institutionalized elderly people: fall risk factors from the nursing diagnosis. Rev. latinoam. enferm. [Internet]. 2015 Dec [cited 2016 July 01]; 23(6):1130-1138. Available from: http://dx.doi.org/10.1590/0104-1169.0285.2658
- 14. Cordeiro LM, Paulino JL, Bessa MEP, Borges CL, Leite SFP. Quality of life of frail and institutionalized elderly. Acta Paulista de Enfermagem [Internet]. 2015 Aug [cited 2016 July 05]; 28(4):361-366. Available from: http://dx.doi.org/10.1590/1982-0194201500061
- 15. Silva FVF, Silva L, Silva ACR. Processo de enfermagem no conforto do paciente com insuficiência cardíaca no domicílio. Aquichan. [Internet]. 2015 [cited 2016 June 30]; 15(1): 116-128. Available from: http://aquichan.unisabana.edu.co/index.php/aquichan/article/view/3952/pdf
- 16. Fechine BRA, Trompieri N. O processo de envelhecimento: as principais alterações que acontecem com o idoso com o passar dos anos. InterSciencePlace [Internet]. 2012 [cited 2016 July 05]; 1(20):132-194. Available from: http://www.interscienceplace.org/isp/index.php/isp/article/view/196/194
- 17. Ebihara S, Ebihara T, Kohzuki M. Effect of Aging on Cough and Swallowing Reflexes: Implications for Preventing Aspiration Pneumonia. <u>Lung.</u> [Internet]. 2012 Feb [cited 2016 July 05]; 190(1):29-33. Available from: http://dx.doi.org/10.1007/s00408-011-9334-z
- **18.** Xue, Q. The Frailty Syndrome: Definition and Natural History. Clinics in Geriatric Medicine, United States [Internet]. 2011 Feb [cited 2016 July 06]; 27(1):1-15. Available from: http://dx.doi.org/10.1016/j.cger.2010.08.009
- **19.** Cornel CS. Sarcopenia and Frailty. In: Cruz- Jentoft AJ, Morley JE. Sarcopenia. John Wiley & Sons, Ltda, 2012.
- 20. Volpini MM, Frangella VS. Avaliação nutricional de idosos institucionalizados. Einstein (São Paulo) [Internet]. 2013 Mar [cited 2016 July 06]; 11(1):32-40. Available from: http://dx.doi.org/10.1590/S1679-45082013000100007
- **21.** Oliveira PB, Tavares DMS. Health conditions of elderly residents in Long-stay Institution second basic human needs. Rev. bras. enferm. [Internet]. 2014 Apr [cited 2016 July 06]; 67(2):241-246. Available from: http://dx.doi.org/10.5935/0034-7167.20140032
- 22. Xu D, Kane RL. Effect of urinary incontinence on older nursing home residents' self-reported quality of life. <u>J Am Geriatr Soc.</u> [Internet]. 2013 Sept [cited July 06]; 61(9):1473-81. Available from: http://dx.doi.org/10.1111/jgs.12408
- 23. Noguchi N, Blyth FM, Waite LM, Naganathan V, Cumming RG, Handelsman DJ, et al. Prevalence of the geriatric syndromes and frailty in older men living in the community: The Concord Health and Ageing in Men Project. Australas J Ageing. [Internet] 2016 Mar [cited 2016 July 06]; 11. Available from: http://dx.doi.org/10.1111/ajag.12310

- 24. Wehrberger C, Madersbacher S, Jungwirth S, Fischer P, Tragl KH. Lower urinary tract symptoms and urinary incontinence in a geriatric cohort a population-based analysis. BJU int. [Internet]. 2012 Nov [cited 2016 July 06]; 110(10):1516-21. Available from: http://dx.doi.org/10.1111/j.1464-410X.2012.11022.x
- **25.** Klaus JH, Nardin VD, Paludo J, Scherer F, Bosco SMD. The prevalence of and factors associated with constipation in elderly residents of long stay institutions. Rev. bras. geriatr. gerontol. [Internet]. 2015 [cited 2016 July 06]; 18(4):835-843. Available from: http://dx.doi.org/10.1590/1809-9823.2015.13175
- 26. Saga S, Vinsnes AG, Mørkved S, Norton C, Seim A. Prevalence and correlates of fecal incontinence among nursing home residents: a population-based cross-sectional study. <u>BMC geriatr.</u> [Internet]. 2013 Aug [cited 2016 July 06]; 30:13-87. Available from: http://dx.doi.org/10.1186/1471-2318-13-87
- 27. Gomes EC, Marques AP, Leal MC, Barros BP. Factors associated with the danger of accidental falls among institutionalized elderly individuals: an integrative review. Ciênc. saúde coletiva. [Internet]. 2014 Aug [cited 2016 July 07]; 19(8):3543-3551. Available from: http://dx.doi.org/10.1590/1413-81232014198.16302013
- 28. Álvarez Barbosa F, Del Pozo-Cruz B, Del Pozo-Cruz J, Alfonso-Rosa RM, Sañudo Corrales B, Rogers ME. Factors Associated with the Risk of Falls of Nursing Home Residents Aged 80 or Older. Rehabil Nurs. [Internet]. 2016 [cited 2016 July 07]; 41(1):16-25. Available from: http://dx.doi.org/10.1002/rnj.229
- 29. Santos AA, Mansano-Schlosser TCS, Ceolim MF, Pavarini SCI. Sono, fragilidade e cognição: estudo multicêntrico com idosos brasileiros. Rev. bras. enferm. [Internet]. 2013 June [cited 2016 July 06]; 66(3):351-357. Available from: http://dx.doi.org/10.1590/S0034-71672013000300008
- 30. Mansano-Schlosser TC, Santos AA, Camargo-Rossignolo SO, Freitas DCCV, Lorenz VR, Ceolim MF. Idosos institucionalizados: organização cronológica das rotinas diárias e qualidade do sono. Rev. bras. enferm. [Internet]. 2014 Aug [cited 2016 July 06]; 67(4):610-616. Available from: http://dx.doi.org/10.1590/0034-7167.2014670417
- 31. Santos, ZMSA; Martins, JO; Frota, NM; Caetano, JÁ; Moreira, RAN; Barros, LM. Universal self-care practiced by the elderly in a long-term institution. Rev. bras. geriatr. gerontol. [Internet]. 2012 Dec [cited 2016 July 07]; 15(4):747-754. Available from: http://dx.doi.org/10.1590/S1809-98232012000400013
- **32.** Clares JWB, Freitas MC. Nursing diagnosis of the Nutrition domain identified among the elderly in the community. Rev. Eletr. Enf. [Internet]. 2013 Oct/Dec [cited 2016 July 07];15(4):940-7. Available from: http://dx.doi.org/10.5216/ree.v15i4.20513
- 33. Alves-Silva JD, Scorsolini-Comin F, Santos MA. Idosos em instituições de longa permanência: desenvolvimento, condições de vida e saúde. Psicol. Reflex. Crit. [Internet] 2013 Dec [cited 2016 July 06]; 26(4):820-830. Available from: http://dx.doi.org/10.1590/S0102-79722013000400023

- 34. Pavan FJ, Meneghel SN, Junges JR. Mulheres idosas enfrentando a institucionalização. Cad. saúde pública. [Internet]. 2008 Sept [cited 2016 July 06]; 24(9):2187-2189. Available from: http://dx.doi.org/10.1590/S0102-311X2008000900025
- **35.** Marin MJS, Miranda FA, Fabbri D, Tinelli LP, Storniolo LV. Compreendendo a história de vida de idosos institucionalizados. Rev. bras. geriatr. gerontol. [Internet]. 2012 [cited 2016 July 06]; 15(1):147-54. Available from: http://dx.doi.org/10.1590/S1809-98232012000100016
- **36.** Clos MB. Recusa, conformidade e libertação: considerações sobre o processo de adaptação de idosos em uma instituição de longa permanência para idosos. [dissertação de mestrado]. Porto Alegre (RS): Universidade Federal do Rio Grande do Sul. Faculdade de Educação [Internet]. 2010 [cited 2016 July 06]; 113p. Available from: http://www.lume.ufrgs.br/handle/10183/28800
- **37.** Gonçalves JRL, Silva JC, Santos EA, Soares PPB, Silvano CM, Campos EC. Mecanismos de enfrentamento utilizados por idosos residentes em instituições de longa permanência. REFACS [Internet] 2014 [cited 2016 July 06]; 2(1):28-33. Available from: http://dx.doi.org/10.18554/refacs.v2i1.1145
- **38.** Fornazari SA, Ferreira RER. Religiousness/spirituality in oncological patients: life quality and health. Psicol. teor. pesqui. [Internet]. 2010 [cited 2016 July 06]; 26(2):265-272. Available from: https://dx.doi.org/10.1590/S0102-37722010000200008
- **39.** Lucchetti G, Granero AL, Bassi RM, Nasri F, Nacif SA. The elderly and their spirituality: impact on different aspects of aging. Rev. bras. geriatr. gerontol. [Internet]. 2011 Mar [cited 2016 July 06]; 14(1):159-167. Available from: http://dx.doi.org/10.1590/S1809-98232011000100016
- **40.** Vitorino LM, Vianna LAC. Coping religioso/espiritual de idosos institucionalizados. Acta paul. enferm. [Internet]. 2012 [cited 2016 July 05]; 25(spe1):136-142. Available from: http://dx.doi.org/10.1590/S0103-21002012000800021

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