



NURSING PROCESS BASED ON VIRGINIA HENDERSON APPLIED FOR A WORKING ELDERLY

PROCESSO DE ENFERMAGEM FUNDAMENTADO EM VIRGINIA HENDERSON APLICADO A UMA TRABALHADORA IDOSA

PROCESO DE ENFERMERÍA FUNDAMENTADO EN VIRGINIA HENDERSON APLICADO A UNA TRABAJADORA ANCIANA

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ABSTRACT

Objective: to describe the application of the nursing process to a working elderly based on the theory of Virginia Henderson. **Method:** a descriptive study of the clinical case type, held in October 2015 with an elderly worker. Diagnoses, outcomes, and nursing interventions were made according to ICNP® Version in 2015 and based on the theory of Fundamental Human Needs of Virginia Henderson. **Results:** the elaborate nursing diagnoses were: food intake pattern impaired, fall risk, ineffective peripheral tissue perfusion and satisfaction at work. The implementation of interventions involved individual counseling activities of educational nature. **Conclusion:** it was possible to realize that diagnostics focused on the biological aspect prevailed, and intervention strategies were focused on the elderly orientation for her to meet the basic human needs. **Descriptors:** Nursing; Nursing Diagnosis of; Health of the Elderly; Worker's health.

RESUMO

Objetivo: descrever a aplicação do processo de enfermagem a uma trabalhadora idosa, fundamentado na teoria de Virginia Henderson. **Método:** estudo descritivo, do tipo caso clínico, realizado no mês de outubro de 2015 com uma trabalhadora idosa. Os diagnósticos, resultados e as intervenções de enfermagem foram elaborados segundo a CIPE® versão 2015 e fundamentados na teoria das Necessidades Humanas Fundamentais de Virginia Henderson. **Resultados:** os diagnósticos de enfermagem elaborados foram: padrão de ingestão de alimentos prejudicado, risco de queda, perfusão tissular periférica ineficaz e satisfação no trabalho. A implementação das intervenções envolveu atividades de orientação individual de cunho educativo. **Conclusão:** pôde-se perceber que prevaleceram diagnósticos voltados para o aspecto biológico e as estratégias de intervenções foram centradas na orientação da idosa para que ela conseguisse satisfazer as necessidades humanas fundamentais. **Descritores:** Enfermagem; Diagnóstico de Enfermagem; Saúde do Idoso; Saúde do Trabalhador.

RESUMEN

Objetivo: describir la aplicación del proceso de enfermería a una trabajadora anciana fundamentado en la teoría de Virginia Henderson. **Método:** estudio descriptivo, del tipo caso clínico, realizado en el mes de octubre de 2015 con una trabajadora anciana. Los diagnósticos, resultados y las intervenciones de enfermería fueron elaborados según la CIPE® versión 2015 y fundamentados en la teoría de las Necesidades Humanas Fundamentales de Virginia Henderson. **Resultados:** los diagnósticos de enfermería elaborados fueron: Estándar de ingestión de alimentos perjudicado, Riesgo de caída, Perfusión tisular periférica ineficaz y Satisfacción en el trabajo. La implementación de las intervenciones envolvió actividades de orientación individual de naturaleza educativo. **Conclusión:** se puede percibir que prevalecieron diagnósticos dirigidos para el aspecto biológico y las estrategias de intervenciones fueron centradas en la orientación de la anciana para que ella conseguiese satisfacer las necesidades humanas fundamentales. **Descritores:** Enfermería; Diagnóstico de Enfermería; La Salud de las Personas Mayores; Salud de los Trabajadores.

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INTRODUCTION

Aging is no longer just an expectation, and it has become a reality for most companies. In Brazil, the aging process abruptly emerged, and it is in constant progression, reflecting the age pyramids of the population. Also, in the Brazilian Census 2010, the elderly people already have a representation of 7.4% of the total population.¹

Faced with this growth and change in social life and the world of work, it must be considered that the aging and retirement processes occur in different ways, with multiple interfaces. Although there are these changes, life experience and the need to keep up and working contributes to the elderly population continuing in the working world, overcoming barriers imposed by society and by the time, adapting to their new condition.

In this context, Nursing is an important factor in elderly care in the work environment and it can perform care actions planning that enables the improvement of the health status of this population to make a link between the aging process and the peculiarities of each workplace, optimizing and enhancing the ability of each elderly, respecting their individuality.

For this assistance be effective, it is necessary to use the Nursing Process (NP) using a standardized and universal language, based on nursing theories and concepts relevant to the individualized care.²

Thus, to properly perform the nursing process, the nurses have a variety of nursing theories, who should know to select the best for the needs of the elderly context, an integral perspective.²

Among the various Nursing theories, there is the theory of the fundamental needs of Virginia Henderson. Through concepts and models, she aims to establish bases of knowledge to guide professional practice. This theoretical model indicates an analysis in which the person is unique and complex, with fourteen basic needs, subdivided into categories that encompass the biological, psychological, social, spiritual and moral individual components.³

The fourteen health needs described by the theory do not show health problems, but the areas where these problems may occur, constituting elements that will guide nursing care, which are: breathing normally, eating and drinking properly, eliminating

organic waste, moving and maintaining a desirable posture, sleeping and resting, dressing and undressing, maintaining body temperature at normal level, keeping the body clean and protecting the skin, avoiding environmental risks, communicating, learning, practicing according with their faith, providing sense of accomplishment and participating in recreational activities.³

Therefore, the theoretical model proposed by Henderson is considered as a facilitator of clinical nursing care for the elderly people, since it favors ways of assessing the human being in its entirety. It also collaborates in the organization of critical thinking of nurses, providing a systematized care, based on scientific knowledge, and considering the stimuli related to the basic needs of the elderly in a comprehensive and humane perspective. In this context, the aim of this study was to describe the application of the nursing process to a reasoned elderly working in the theory of Virginia Henderson.

METHOD

A descriptive study of the case type, held in October 2015 in a clinic of the State University of Ceará (UECE) in the city of Fortaleza-CE with an elderly worker, 66 years old, working as a librarian at the University.

Data collection was performed by physical examination and clinical interview guided by a form specifically designed for this study, which considered the assumptions of the steps of the nursing process: data collection, nursing diagnosis, planning (expected results and interventions), implementation and evaluation.⁴ The organization and structuring of the data collection instrument followed the fourteen basic needs listed by Virginia Henderson.

The application of this instrument allowed to obtain information from subjective and objective order of biological, psychological, social, spiritual and moral components as well as the demands of the elderly person, according to the proposal of Henderson. Physical examination also resulted in additional data collection, through the information that helped in the development of critical thinking and diagnostic reasoning essential to establish the diagnosis, outcomes, and nursing interventions.

The elderly woman was monitored for one month, with three meetings. In the first meeting, the research proposal and proceeded with the completion of data collection were presented. After analyzing the data collected, the nursing diagnoses were elaborated. For this analysis, the clinical reasoning process proposed by LeFevre was used, consisted of five phases: 1) creation of a list of possible problems/diagnoses; 2) elimination of similar problems/diagnoses; 3) name the potential and real problems and clarify what is causing or contributing to them; 4) determination of the risk factors that must be controlled; 5) identification of the resources, strengths, and areas for promoting health.⁵

From the established diagnostic, it was proceeded with the planning of care, developing interventions for each diagnosis and the results to be achieved with them. Then, the implementation of interventions occurred and, finally, at the third meeting, the evaluation was made by determining whether the expected results were achieved.

It is noteworthy that the diagnoses, outcomes, and nursing interventions were made according to ICNP® Version 2015,⁶ following the guidelines of the International Council of Nurses (ICN), established in ISO 18104/14 of the International Organization for Standardization (ISO). Thus, for the preparation of statements of diagnoses and nursing outcomes, obligatorily, a term the focus axis and a term of Judgment axis were included as required and the axes Focus, Judgement, Customer, Location and Time as additional terms. For the preparation of statements of nursing interventions, obligatorily, a term action axis and a term target were included, considered to be any of the terms contained in the other axes, except for the terms of Judgment axis; and the additional terms of the remaining axes as required.⁷

In some cases, when they were terms not found for the situation identified, terms were used in this literature and in clinical practice to construct the set of diagnoses and nursing interventions. The elaborated statements were classified according to the theoretical model of study related to basic human needs.

The ethical and legal principles of research involving human beings were respected, as recommended by Resolution

466/12 of the National Health Council.⁸ The elderly spontaneously agreed to join the study by signing the Consent Form. The project that originated this work was approved by the Research Ethics Committee of UECE under the Protocol 446,753 and CAAE 22739713.7.0000.5534.

RESULTS

Case presentation

LMOS, 66, female, Caucasian, born in Fortaleza-Ceará, single, graduate in library science and Catholic. She has been working as a librarian for 40 years, and currently, she is retired but continues to exercise her activities in the university library. She has a history of breast cancer for eight years, having performed chemotherapy and surgical treatment (total mastectomy of the right breast). Five years ago, she was diagnosed with hypertension, type 2 diabetes mellitus, and hypercholesterolemia. She is continuous using antidiabetic, antihypertensive and lipid-lowering agents. She complains of a dry cough all day, with greater intensity at night. Physical examination: good general condition; alert; oriented; appropriate clothing; afebrile (temperature=36.5°C); anicteric; eupneic (respiratory rate=18 breaths per minute). Pulmonary auscultation: universal breath sounds present without adventitious sounds. Auscultation of regular heart sounds; phonetic sounds; two times; heart rate: 70 beats per minute; normotensive (blood pressure=130x80 mmHg). Grade I obese (BMI=32.5 kg/m²); waist circumference of 112 cm; fasting glucose of 190 mg/dL. She refers to have more than five meals a day, with no restrictions and concerns about the type of food. She ingests a small amount of water, complaining not to feel thirsty. Urinary elimination on average three times a day. She mentions recurrent urinary tract infection. Preserved bowel habits. She has the right leg with a bandage for compression due to the presence of edema (++/4+). She reports have trouble falling asleep and having fractionated sleep getting up at night to go to the bathroom. She practices aerobics twice a week. She is vain; she walks with high heels; and has fallen twice, in the workplace, dislocating a shoulder (two years ago) and currently injuring her right ankle. Her clothes are according to the environment temperature, but she refers feeling very cold, especially

in the workplace. She is communicative, interacting well with co-workers, always happy to be ratified in the workplace. She takes care of her mother, 90 years old and says she like to travel and see the world, and sometimes it is impossible by not having anyone to take care of her mother. She says the “things” that she loves most in life are family, religion, and work.

Care plan

Data collection and physical examination detected problems of the following

Henderson's theory needs: Eating and drinking, Moving and maintaining desirable posture and occupying for a self-performance.

Based on the prepared nursing diagnoses, it was observed that the elderly person had care needs in biological and social components, with the possibility of improving the health status and facilitating the adaptation process, through the individualized care plan (Figure 1).

	Changed need	Nursing diagnosis	Expected result	Nursing intervention
Biological components	Eating and drinking properly	Harmed food intake pattern	Suitable food intake pattern	<ul style="list-style-type: none">- Giving advice on the diet- Encouraging adherence to diet- Establishing food scheme, according to the needs of the elderly
	Moving and maintaining desirable posture	Risk of falling	Decreased risk of falling	
		Ineffective peripheral tissue perfusion	Improved peripheral tissue perfusion	
Social component	Occupying with self-performance	Job satisfaction	High Job Satisfaction	<ul style="list-style-type: none">- Giving advice on fall prevention- Giving advice on medication- Encouraging the elderly to wear comfortable shoes- Giving advice on safety measures at work- Advising on edema- Raising right leg- Advising of rest at home- Advising of compression therapy on the right foot- Giving advice on foot care- Reinforcing interactive behavior

Figure 1. Care plan of nursing for an elderly worker based on the theory reference of Virginia Henderson. Fortaleza-CE, Brazil, 2016.

Faced with these diagnoses, a nursing care planning was established, whose actions were directed to the promotion of health. It was sought to develop a plan of care that was in line with the reality of the elderly, making her an active participant on its implementation.

The implementation of interventions involved individual guiding activities of educational nature, in the clinic and the workplace.

Regarding the standard diagnostic intake of food impaired, it has been produced based on the report of the elderly not to be careful with high calorie and high sodium food, showing hypercholesterolemia, hyperglycemia and body mass index (BMI). The elderly was asked to keep a daily routine consumption of healthy foods and enhancing the importance of regular

physical activity, focusing on weight loss and improvement of clinical results.

The diagnosis of fall risk was related to the report of previous falls, the intrinsic factors such as age over 60 years old, swelling in the right lower limb, medication use; and extrinsic factors related to environmental conditions, slippery surfaces and obstacles, and use of inappropriate shoes. In this sense, the nursing interventions were for the fall prevention guidance, care with the use of medication, the use of comfortable shoes, as well as in promoting safety measures at work.

The ineffective peripheral tissue perfusion diagnosis was present because the elderly has shown fluid retention on the right foot. She was oriented for proper protection of the ankle with a bandage, observing changes in the affected limb and raising the right leg during working hours to

stimulate blood circulation and reduce swelling.

Diagnosis of job satisfaction was developed because of the pleasure and love for work expressed in her report. The importance of the elderly in remaining active with good interaction between co-workers was strengthened.

Interventions satisfactory response at all meetings. The elderly showed understanding on various issues related to their health condition, thanks for the information received and interest in implementing the chosen interventions, except for the change in food seen as a tough task.

DISCUSSION

The aging process brings several changes regarding the reduction of physiological reserves, as well as increased susceptibility to adverse health states. Such modifications are neuroendocrine, immune and neuromuscular level, and may lead to comorbid conditions, loss of functional capacity and dependence.

With advancing age mobility problems may arise among the elderly, mainly due to joint stiffness, pain when moving, polypharmacy and number of comorbidities.⁹ These problems, added to inherent to each elderly conditions, can cause falls and irreparable losses.

Falling is a major cause of hospitalization and death among the elderly people. They can be caused by intrinsic factors: female gender, advanced age, sedentary lifestyle, falls history of poor self-rated health, chronic diseases, more continuous of medicines and decreased visual acuity.¹⁰ Also, extrinsic environmental factors. The consequences are disastrous and often irreversible.

In general, in aging, there is a decline in motor performance, and gradual decrease of the movement affecting the work capacity and adaptability to the environment. It is noteworthy that the woman has a greater loss of muscle mass and bone due to reduced estrogen, contributing to deteriorating of her functional state; and performing multiple tasks at home and in the workplace contributes to an increased propensity to falls.¹¹

Nursing can identify these factors interacting as determinants and predisposing agents for falls in the home, employees' and institutional environment,

from protocols and rating scales to develop interventions to reduce the risk of falls and serious injury.

Among the main causes of falls in the elderly people, there are nutritional disorders such as sarcopenia, obesity and protein-energy malnutrition that can cause decline in muscle strength, balance deficit, reduced postural control, coordination and flexibility.¹⁰

In this study, the elderly has obesity associated with the occurrence of metabolic disorders and cardiovascular disease, more prevalent in postmenopausal women,¹² and seen as a potential marker or weakness signal.¹³ Obesity is characterized by increased body fat and is directly related to the accelerated functional decline and high risk of morbidity and mortality.¹⁴

Obese elderly people have a maldistribution of body fat and higher than the body can handle, compromising the balance and providing falls.¹⁵ Studies suggest that weight reduction and the introduction of physical exercise can improve physical function and physical dysfunction biomarkers among older adults with overweight or obese, as well as decrease insulin resistance and the risk of developing diabetes, with improvement glycemic control.¹³

In this context, considering that especially in the early years of age the prevalence of elderly overweight or obese increases,¹⁶ nurses should be aware of this clinical condition and promote educational nature of care, educating and sensitizing the elderly to adopt habits food and ways of healthy life.

The ineffective peripheral tissue perfusion diagnosis is related to poor blood circulation to peripheral tissues for oxygen transport, liquids, and nutrients at the cellular level; and associated with the temperature and color of the skin, decreased arterial pulse, changes in arterial blood pressure, wound healing and growth of body hair can jeopardize the health.⁶ In this study, the edema was the main reason for making the diagnosis of ineffective peripheral tissue perfusion.

In old age, capillary fragility and loss of collagen,¹⁷ together with obesity and numerous comorbidities, especially diabetes, may impair circulation to the lower limbs, causing vascular problems and falls. The scientific literature confirms that peripheral tissue perfusion is mainly

detected in diabetic patients^{18,19} in whom peripheral neuropathy is common, affecting up to 50% of patients, accounting for high morbidity, mortality and reduced quality of life²⁰

The food²¹ and glycemic control are crucial components for the treatment of diabetes, but difficult to control for many patients. These two factors when decompensated can cause serious cardiovascular and irreversible problems.²⁰ Therefore, in recent decades, researchers and professionals worldwide support for disease control and improvement of reduced blood flow to the tissues, diets rich in whole grains, fruits, vegetables; moderate intake of alcohol and red meat,²¹ and the abundant water consumption.

The aging process for many people is a traumatic event, resulting in the worsening quality of life and social isolation. The occupancy for the elderly is a successful alternative to avoid social, psychological and emotional problems. In this research, the elderly even retired, still working and was happy and contemplated for her work, meeting some of her needs.

It is true that disability and weaknesses increase with age, but there is no consensus when they appear. This means that the elderly can maintain functional capacity and performance preserved for a work activity. In Brazil, the law permits at that time of life, the retired back to work to continue to exercise their function and economic activity in society.²²

Several factors are singled out by the literature justifying the reintegration of retired elderly people in the labor market. These factors relate to the subjective experiences of pleasure at work, such as the occupation of the free time, maintaining a physical and mental activity; or even because of financial needs, both for loss and decreased purchasing power as the growing need to provide the family. Therefore, the link with the work gives retirees a sense of usefulness and social integration, justifying the stay in the labor market, beyond the symbolic link generated by worker identity.²³

CONCLUSION

It could be perceived that diagnostics focused on the biological and social components prevailed. The intervention strategies were focused on elderly

orientation for her to meet her basic human needs.

Thus, it is concluded that the nursing process is only going to add as a methodological tool in the nursing activities, mainly educational and clinical guidance activities, which together with the individual permit the satisfaction of their needs.

It is recognized that the nursing process, when applied correctly and in all its phases, using its own terminology, based on a nursing theory guiding all its stages, is shown to be essential in the nursing care, promoting a more qualified and scientific assistance, resulting in improvements in the organization of nursing activities, greater professional autonomy and improving the health condition of the individual care. Thus, its use should be encouraged in the different scenarios of professional work.

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