



Rev. Enferm. UFSM - REUFSM Santa Maria, RS, v. 11, e8, p. 1-19, 2021 DOI: 10.5902/2179769242086

ISSN 2179-7692

Original Article

Submission: 01/29/2020 Acceptance: 10/30/2020 Publication: 01/28/2021

Characterization of hospitalized elderly people according to the Neuman Systems Model: contributions for nursing*

Caracterização de pessoas idosas hospitalizadas conforme Modelo de Sistemas de Neuman: contribuições para a enfermagem

Caracterización de personas mayores hospitalizadas según el Modelo de Sistemas de Neuman: contribuciones para la enfermería

Eliane Raquel Rieth Benetti^I, Margrid Beuter^{II}, Paloma Horbach da Rosa^{III}, Carolina Backes^{IV}, Caren da Silva Jacobi^v, Francine Feltrin de Oliveira^{vi}

Abstract: Objective: to characterize hospitalized elderly people according to the dimensions proposed by the Neuman Systems Model. Method: an extract from a qualitative study, based on the Convergent Care Research proposal, developed in a teaching hospital with 30 elderly people. Data production took place from November, 2016 to August, 2017 through a conversation interview, guided by a research protocol, and analyzed in the light of the Neuman Systems Model. Results: hospitalized elderly people were characterized according to the physiological (gender, age, diagnosis, comorbidities), psychological (changes in mood, feelings and behaviors), sociocultural (marital status, family structure, monitoring during hospitalization, work activity), development (years of study, cognitive function) and spiritual (religion, participation in the church, religious support and interference from hospitalization). Conclusion: identifying the interactive dimensions proposed by the Neuman Systems Model enables understanding the elderly person as an open client system and provides nurses with justifications for clinical judgment and decision making.

^{*}Extracted from the thesis "Stressors and well-being variances in hospitalized elderly people: medium range nursing theory", Nursing Postgraduate Program, Federal University of Santa Maria, 2019.



¹ Nurse, PhD in Nursing, University Hospital of Santa Maria (HUSM)-Federal University of Santa Maria (UFSM). Ijuí, Rio Grande do Sul, Brazil. E-mail: elianeraquelr@yahoo.com.br. Orcid iD: https://orcid.org/0000-0003-1626-5698

II Nurse, PhD in Nursing, Associate Professor of the Department of Nursing, Federal University of Santa Maria (UFSM). Santa Maria, Rio Grande do Sul, Brazil. E-mail: margridbeuter@gmail.com. Orcid: https://orcid.org/0000-0002-3179-9842

III Nurse, Master's student of Nursing, Federal University of Santa Maria (UFSM). Santa Maria, Rio Grande do Sul, Brazil. E-mail: palomahorbach93@hotmail.com. Orcid: https://orcid.org/0000-0003-4463-1042

IV Nurse, PhD student of Nursing, Federal University of Santa Maria (UFSM). Santa Maria, Rio Grande do Sul, Brazil. E-mail: karolbackes@hotmail.com. Orcid: https://orcid.org/0000-0002-2504-9105

V Nurse, PhD in Nursing, Professor of Basic, Technical and Technological Education at Colégio Politécnico, Federal University of Santa Maria (UFSM). Santa Maria, Rio Grande do Sul, Brazil. E-mail: cahjacobi@gmail.com. Orcid: https://orcid.org/0000-0002-8917-6699

VI Nurse, Master's in Nursing, Professor of the Multiprofessional Residency Program at Hospital de Clínicas de Passo Fundo. Passo Fundo, Rio Grande do Sul, Brazil. E-mail: francinefeltrin@uol.com.br. Orcid: https://orcid.org/0000-0002-5105-7053

Descriptors: Elderly; Hospitalization; Nursing Care; Nursing Theory; Geriatric Nursing

Resumo: Objetivo: caracterizar as pessoas idosas hospitalizadas quanto às dimensões propostas pelo Modelo de Sistemas de Neuman. Método: recorte de estudo qualitativo, ancorado na proposta da Pesquisa Convergente Assistencial, desenvolvido em hospital de ensino com 30 pessoas idosas. A produção dos dados ocorreu de novembro/2016 a agosto/2017 por meio de entrevista conversação, guiada por protocolo de pesquisa, analisada à luz do Modelo de Sistemas de Neuman. Resultados: pessoas idosas hospitalizadas foram caracterizadas conforme a dimensão fisiológica (sexo, idade, diagnóstico, comorbidades), psicológica (alterações de humor, sentimentos e comportamentos), sociocultural (estado civil, arranjo domiciliar, acompanhamento durante hospitalização, atividade laboral), de desenvolvimento (anos de estudo, função cognitiva) e espiritual (religião, participação na igreja, suporte religioso e interferência da hospitalização). Conclusão: identificar as dimensões interativas propostas pelo Modelo Sistemas de Neuman permite compreender a pessoa idosa como um sistema cliente aberto e proporciona ao enfermeiro justificativas para o julgamento clínico e tomada de decisão.

Descritores: Idoso; Hospitalização; Cuidados de Enfermagem; Teoria de Enfermagem; Enfermagem Geriátrica

Resumen: Objetivo: caracterizar personas mayores hospitalizadas en cuanto las dimensiones propuestas por el Modelo de Sistemas de Neuman. Método: estudio cualitativo, basado en la propuesta de Investigación Convergente Asistencial, desarrollado en un hospital universitario con 30 personas mayores. Datos producidos desde noviembre/2016 hasta agosto/2017 a través de una entrevista de conversación, guiada por protocolo de investigación, analizada a la luz del Modelo de Sistemas de Neuman. Resultados: los hospitalizados se caracterizaron según aspectos fisiológicos (género, edad, diagnóstico, comorbilidades), psicológicos (cambios de humor, sentimientos, conductas), socioculturales (estado civil, arreglo del hogar, seguimiento durante la hospitalización, actividad laboral), desarrollo (años de estudio, función cognitiva) y espiritual (religión, participación en la iglesia, apoyo religioso, interferencia de la hospitalización). Conclusión: identificar las dimensiones interactivas propuestas por el Modelo de Sistemas de Neuman permite comprender la persona mayor como un sistema cliente abierto y proporciona al enfermero justificaciones para juicio clínico y la toma de decisiones.

Descriptores: Anciano; Hospitalización; Atención de Enfermería; Teoría de Enfermería; Enfermería Geriátrica

Introduction

Due to a multifactorial process inherent to human existence, aging involves changes in all bodily systems. However, although senescence is considered a biological process, each individual ages in a unique way, which demands personalized attention by health professionals. This stage of life signals the possibility of an increase in Chronic Noncommunicable Diseases, which are consistent with dependence on care and health services. These diseases require continuous monitoring and contribute to health problems and the need for hospitalization, which can predispose the elderly to social, economic and biological decline.¹

With regard to hospitalization, various difficulties and challenges are faced by the nursing staff in caring for elderly persons, since the identification of care needs leads to the peculiar characteristics of senescence and decreased functional capacity in addition to aggravating conditions.² This requires knowledge and skills among nursing professionals, so that they meet the particularities of the elderly and those issues inherent to the aging process.²

It is underscored that one of the challenges in caring for the elderly is to contribute in such a way that, despite the progressive limitations that can occur with aging, they rediscover possibilities of living with maximum autonomy and independence. Given the above, it is emphasized that aging with preserved functional capacity depends on personal, social and environmental factors, which can be positive or negative determinants for aging with health.³

In the care of hospitalized elderly people, it is imperative that nurses know their physiological, psychological, sociocultural, developmental and spiritual dimensions, in addition to identifying and grouping their needs through critical evaluation.⁴ These actions will promote the nursing diagnoses and planning the respective results and interventions for each individual.

In this context, the knowledge achieved by integrating theory with clinical practice proves the quality of care, rendering it dynamic and scientific, through the Nursing Process. This methodological instrument that guides professional nursing care and the documentation of professional practice is organized into five stages, each guided by theoretical support,⁵ and represented by Theoretical Models and Nursing Theories.

Among these models and theories that support and contribute towards an understanding of the elderly regarding illness and hospitalization, the Neuman Systems Model (NSM) stands out, since it emphasizes the person as a whole, with his or her respective physiological, psychological, sociocultural, developmental and spiritual dimensions. The physiological dimension refers to the structure and functioning of the body; psychological refers to mental processes in interaction with the environment; sociocultural to the effects and influences of

cultural and social aspects; developmental to processes related to age and its activities; and spiritual to spiritual beliefs and influences.⁶

This model considers a dynamic and open approach to care, having being developed to provide a unified focus for the definition of nursing problems and for an understanding of the patient in interaction with the environment.⁶ From this perspective, it is understood that the manner in which the elderly person responds to hospitalization depends on life history, preparation for the aging process, previous experiences with illnesses, emotional conditions, family support and their relationship with health professionals.

Nursing integrates the theoretical model in which the profession is concerned with all dimensions that affect the person in his or her environment and with the stability of the client system, conceptualized as the dynamic set of interrelationships between physiological, psychological, sociocultural, developmental and spiritual dimensions.⁶ Thus, nursing has the responsibility to investigate the situation of each elderly individual as a whole, to determine their needs and to propose interventions that can promote a balance in the health/disease process, which is possible through the bonds between individual, nurse and environment.⁶ It is proposed that the nurse is responsible for being attentive to the needs of the hospitalized elderly person, in addition to planning, prescribing, guiding and organizing actions that contemplate the stability of the dimensions that integrate the client system.

Thus, identifying the physiological, psychological, sociocultural, developmental and spiritual dimensions of hospitalized elderly people can elucidate singularities and perspectives that support nursing care directed to this population. In this case, the present study can contribute to an increased knowledge of Gerontological Nursing, an emerging specialty in the Country, which has been promoted to seek concrete results for the needs of the elderly and their families, in order to guarantee the quality of care provided.3

Consequently, this study was based on the following research question: what is the characterization of hospitalized elderly people in terms of physiological, psychological, sociocultural, developmental and spiritual dimensions? In order to answer this question, the objective was to characterize hospitalized elderly people according to the dimensions proposed in the Neuman Systems Model.

Method

This is an excerpt from a doctoral thesis in nursing, carried out using qualitative and descriptive field research, based on the methodological proposal of Convergent Care Research, entitled "Stressors and well-being variances in hospitalized elderly people: medium range nursing theory".4

The study was carried out in three inpatient units of a public teaching hospital in the interior of Rio Grande do Sul (RS), namely: Medical Clinic I (28 beds), Medical Clinic II (27 beds) and Surgical Clinic (52 beds). It should be noted that these units are not specialized for the care of elderly people, but have aspects in common, such as the number of this hospitalized population (approximately 60% of patients), similarity in physical structure, hospitalization flowchart and organization of the work process.

Thirty hospitalized elderly people selected by convenience participated in the study, who met the selection criteria, namely: hospitalized for at least 24 hours in the referred units and who had preserved cognitive capacity. For this selective evaluation of the participants, the Mini Mental State Examination (MMSE) was applied, considering that a score higher than the cutoff point is indicative of preserved cognitive capacity. The cutoff points adopted in this study were literate - cutoff point 18; studied from 1 to 3 years - cutoff 21; studied from 4 to 7 years - cutoff 24; and those who studied more than 7 years - cutoff 26.7

All elderly people invited by the researcher (38), verbally, accepted to participate in the study, but eight of these failed to reach the cutoff point in the MMSE and were excluded from the study. The number of participants was determined by the need for information and quality of the data produced. Thus, with the participation of 30 elderly people, the recurrence and complementarity of information regarding the object of study was achieved.8

Data production took place from November 2016 to August 2017. Initially, the researcher identified, among the hospitalized elderly people, those who could potentially be included in the study, informed them of the study objectives and selected them according to their MMSE scores. The participants were asked about the dimensions from their personal perspective, as proposed by Neuman, through a conversation interview. This technique took the form of an informal conversation during care practice and the researcher sought to find the relevant threads to focus the conversation. Thus, at the same time this type of interview allows spontaneous manifestations by the interviewee, and also enables the researcher's intervention, which must take into account the theoretical basis and the information collected regarding the object and objectives of the study.

For each elderly person, three to four conversation meetings were held, for a total of 70 hours, with a mean duration of 140 minutes. The interviews were carried out at the bedside, using curtains and screens, and the records were made in a research protocol. This protocol included characteristics of the elderly person according to the dimensions of NSM, the MMSE and the Katz Index for Independence in Activities of Daily Living.¹⁰ This instrument made it possible to assess the performance of six functions (bathing, dressing, toileting, transferring, continence and feeding) during hospitalization and classify each elderly person as independent or dependent for each function.

The data were organized in an electronic spreadsheet using the Microsoft Excel® software; next, they were analyzed via descriptive statistics using absolute and relative frequency calculations, and then discussed in the light of Betty Neuman's theoretical model⁶ and relevant current literature.

All ethical aspects of the research were respected according to Resolution 466/12 of the National Health Council. The data production was carried out after signing of the Free and Informed Consent Form. For the preservation of anonymity, elderly people were identified by the letters "PI", followed by a consecutive cardinal number. The research project was approved by the Research Ethics Committee on October 12, 2016, under Decision nº 1.771.984, Certificate of Presentation for Ethical Appreciation nº 60668116.2.0000.5346.

Results

The study included 30 elderly people hospitalized in medical and surgical clinics, of which 10 were from the Surgical Clinic, 10 from the Medical Clinic I and 10 from the Medical Clinic II. From the data production, the participants were characterized according to physiological, psychological, sociocultural, developmental and spiritual dimensions, as proposed by Betty Neuman. The characteristics concerning each dimension of the NSM are presented in Table 1 and then described below.

Table 1 – Characteristics of the hospitalized elderly people, according to each dimension of the Neuman Systems Model. Santa Maria, Rio Grande do Sul, Brazil, 2017.

Dimension	Characteristics		
Physiological	Sex		
	Age		
	Diagnosis		
	Comorbidities		
	Prior Hospitalizations*		
	Duration of hospitalizations*		
	Visual, auditory, mastication and locomotive Capacity *		
	Functional Independence *		
Psychological	Alterations in humor		
	Feelings		
	Behavior during hospitalization		
Sociocultural	Marital status		

	Family structure	
	Accompanied during hospitalization	
	Work activity	
Developmental	Years of study	
	Score in Mini Mental State Exam	
	Prior hospitalizations*	
	Duration of hospitalization*	
	Visual, auditory, mastication and locomotion capacity *	
	Functional independence *	
Spiritual	Religiosity	
	Frequency attending church	
	Religious support during hospitalization	
	Interference of hospitalization on religious practices	

^{*} Characteristics grouped according to physiological and developmental dimensions, simultaneously.

Regarding the physiological dimension, the elderly people were characterized in terms of sex, age, diagnosis and comorbidities. As for sex, 16 (53.3%) were men and 14 (46.7%) women. Regarding age group, 18 (60%) were between 60 and 69 years old, 10 (33.3%) were between 70 and 79 years old and 2 (6.7%) over 80 years old. As for the diagnosis at the time of admission, the groups of diseases/conditions that determined the hospitalization of the elderly were notably: cardiovascular diseases, ten cases; neoplasms, ten cases; infectious diseases, seven cases; neurological diseases, two cases; and kidney disease, one case.

It is recognized that comorbidities are predictors of complications and unfavorable outcome during hospitalization. In this regard, 25 (83.3%) of the participants presented comorbidity, a condition that can interfere with independence and autonomy, highlighting Systemic Arterial Hypertension (60%) and Diabetes Mellitus (26.6%).

In relation to the developmental dimension, the items years of study and Mini Mental State Exam (MMSE) scores are presented in Table 2. When asked about their years of study, 2 (6.7%) reported being illiterate, 8 (26.6%), study from 1 to 3 years, 15 (50%) from 4 to 7 years and 5 (16.7%) more than 7 years.

Table 2 – Years of study and minimum and maximum scores in the Mini Mental State Exam. Santa Maria, Rio Grande do Sul, Brazil, 2017.

Years of study	Nº (%) of	Cutoff	Minimum	Maximum
	elderly	point	score	score
Illiterate	2 (6.7)	18	21	23
1 to 3 yrs	8 26.6)	21	23	29
4 to 7 yrs	15 (50.0)	24	25	29
> 7 yrs	5 (16.7)	26	28	29

Questions regarding previous hospitalizations, length of hospital stay, visual, audition, mastication and locomotion and functional independence were grouped with physiological and developmental dimensions, simultaneously. As for previous hospitalizations, six (20%) elderly people reported that this was their first hospitalization. While for 24 (80%), who had previously been hospitalized, the number of hospitalizations ranged from one to ten with a length of stay ranging from 1 to 30 days. The current hospitalization duration ranged from 1 to 50 days.

With regard to vision, 2 (6.7%) mentioned being preserved, 6 (20%) impaired, without correction, and 22 (73.3%) elderly people used glasses or contact lenses. Regarding hearing, 21 (70.0%) stated that it is preserved and 9 (30.0%) reported impairment without correction. With regard to mastication, 1 (3.3%) elderly person was preserved, 5 (16.7%) were impaired, without correction, and 24 (80.0%) used a dental prosthesis. In terms of mobility, in 19 (63.3%) it was preserved, in 4 (13.3%) impaired, without correction, and 7 (23.4%) used walking aid devices.

When functional independence was assessed in the performance of Basic Activities in Daily Living using the Katz Index, it was found that 13 (43.3%) were independent for six functions (bathing, dressing, toileting, transferring, continence and feeding), 3 (10.0%) were independent for all the activities described above minus one, 3 (10.0%) were independent for all activities except bathing, dressing and an additional one, 5 (16, 7%) were independent for all activities except bathing, dressing, toileting and an additional one, 4 (13.3%) were independent

for all activities except bathing, dressing, toileting, transferring plus one additional and 2 (6.7%) were totally dependent.

In the sociocultural dimension, marital status, family structure, monitoring during hospitalization and work activity were addressed. With regard to marital status, 1 (3.3%) was single, 17 (56.7%) married, 11 (36.7%) widowed and 1 (3.3%) divorced. Concerning the family structure, 4 (13.3%) lived alone, 9 (30.0%) with husband/partner, 6 (20.0%) with husband and child, 4 (13.3%) with child, 2 (6.7%) with husband, child and grandson, 2 (6.7%) with child and grandson and 1 (3.3%), respectively, with wife and grandson; husband and sister-in-law; and brother. Regarding the presence or absence of a companion, 22 (73.3%) of the elderly were accompanied during hospitalization.

In relation to work activities, 13 were agricultural workers, 4 housewives, 2 general services and 1, respectively, assistant bricklayer, trader, elderly caregiver, maid, pharmacist, plumber, journalist, metallurgist, driver and baker. Among the elderly, only one was not retired and did not perform any work activity.

The spiritual dimension considered religion, frequency of participation in the church, religious support during hospitalization and interference of hospitalization in religious practices. When asked about their religion, 19 (63.3%) elderly people considered themselves to be Catholic, 5 (16.7%) Evangelical, 2 (6.7%) Pentecostal, 2 (6.7%) without religion, 1 (3.3%) Spiritist and 1 (3.3%) Islamic. Among the elderly, 16 (53.3%) reported that they were practicing and attended church before hospitalization as follows, daily 4 (25.0%), weekly 7 (43.7%) and monthly 5 (31.3 %).

As for visits by the church representative, characterized as religious support during the hospitalization period, 8 elderly people (26.7%) stated that they received a visit from a priest or pastor, which is the most frequent practice. As for their perception of the practice of their rituals, 24 (80.0%) considered their prayers and beliefs strengthened and 6 (20.0%) reported that their stay in the hospital interfered with habits related to religiosity and spirituality.

In order to contemplate the integrality of the person, as proposed by Neuman, aspects related to the psychological dimension were included, such as changes in mood, feelings experienced and behavior during hospitalization. When elderly people were asked if they had mood changes, 14 (46.7%) reported feeling depressed, 2 (6.7%) anxious, 4 (13.3%) irritated and 2 (6.7%) apathetic in the face of hospitalization, while 8 (26.6%) did not mention mood changes.

When asked about the feelings that permeated their days of hospitalization, 23 (76.7%) elderly reported feeling sad and 22 (73.3%) mentioned anguish. Regarding behavior during hospitalization, 11 (36.7%) elderly people expressed acceptance of the illness and treatment process and 19 (63.3%) reported positive coping; no elderly person verbalized denial behavior.

Discuss ion

This study reveals the applicability of NSM in assisting hospitalized elderly people, both to evaluate and characterize client systems and to support the nursing process. The multiplicity of aspects investigated that dynamically harmonize and react with environmental and intrinsic factors of the elderly person contemplate it in its entirety. Thus, the proposed dimensions should be investigated for the effectiveness of care, as the totality determines coping with situations during hospitalization.⁶

It is a consensus that aging can contribute to the body's inability to maintain its homeostasis, which affects the energy reserve and capacity to resist stressors, thus predisposing the individual to possible problems. Since it considers the client system as a whole, NSM is a dynamic and open approach to care, which is consistent with nursing care in the aging process. This is because the goal of nursing is to facilitate optimal well-being by retaining, obtaining or

maintaining the stability of the client system, by assessing evidence and responding to the rapid changes in care needs.6

The elderly people participating in this study were characterized through the physiological, psychological, sociocultural, developmental and spiritual dimensions.⁶ Identifying and meeting these converges with the objectives of gerontological nursing, to meet the needs and particularities of the elderly person, in the quest to maintain their autonomy and independence. In this sense, it is underscored that determining the characteristics of the hospitalized elderly person can qualify the care, since theory and practice are integrated via the nursing process.

As for gender, there was a similar number of elderly men and women, which was not intentionally planned, given that the selection and inclusion took place by convenience. With regard to age, 60% of the elderly people were between 60 and 69 years old. A convergent result was found in a study conducted with elderly people admitted to a hospital in Uberaba, Minas Gerais state, in which the mean age was 68.68 years and the majority was in the 60 to 70 age group.¹¹

Regarding education, it was found that half of the elderly studied from 4 to 7 years and did not finish elementary schooling, data similar to the profile of the elderly in Rio Grande do Sul. 12 Given this variable, it is important to determine their education in order to plan the care, since education can interfere with the perception of health/disease, care and self-care. Furthermore, a study that assessed the prevalence and factors associated with cognitive decline in elderly people with low economic status pointed out those individuals with lower levels of education had a higher prevalence of cognitive decline.¹³

It was found that elderly people with higher education presented better performance in the MMSE, but those with fewer years of education also reached 29 points, the maximum score in this study. It is inferred that this result indicates that, in addition to schooling, other characteristics may influence test performance, such as variables related to environmental and sociocultural demands.7

Regarding marital status, the number of married elderly people is similar to the result of the profile of the elderly in Rio Grande do Sul. An epidemiological study suggests that the relationship between spouses should be evaluated and monitored by health professionals as a means to prevent functional dependence of this population stratum and that this relationship explains healthy aging. 4

Regarding the family structure of the elderly, the majority lived with their spouse or spouse and another family member. It is important to understand that these structures reflect the influence of historical, sociocultural, political, economic and demographic factors, which can interfere positively or negatively in the life of the elderly person and therefore should be evaluated. It is essential that the family is understood as a support organization for the elderly, especially when they need care, because when this does not occur, there could be disharmony in the client system. This result also reveals the importance of monitoring during hospitalization, since the effective participation of companions in the care process can minimize the stressors resulting from hospitalization and enhance well-being and recovery of health.

Hospitalization can influence the religion and spirituality of the elderly, in the same way that they constitute coping strategies to face the situations experienced in hospital. Furthermore, studies indicate that religiosity and spirituality facilitate the acceptance of negative outcomes resulting from chronic diseases and contribute to coping with pathologies and loneliness, among other demands.¹⁶⁻¹⁷

These results reiterate the importance that the spiritual dimension is also respected and valorized, as in addition to contributing to a more active aging, it can "contribute to social, emotional support, well-being and improved health". Therefore, getting to know the elderly person, including their spiritual dimension, allows health professionals to propose care strategies based on ethical and professional commitment. Thus, considerations of spiritual variables are necessary to support a holistic perspective and a commitment to consider the client system.6

As for sensory changes, the majority of elderly people presented visual impairment and used corrective glasses or contact lenses. When asked about hearing, through subjective assessment of hearing loss, some elderly people reported that they perceive a decrease in hearing capacity, but none used hearing aids. Corroborating this result, a study carried out with 108 elderly people admitted to a hospital, with a diagnosis of femoral fracture, identified that most of the participants had visual problems and some hearing difficulties.¹⁹

It should be noted that the elderly person's perception of the "impact of hearing loss is influenced by its magnitude, that is, the more accentuated the loss, the greater the hearing and communicative losses". 20:3584 Given the above, it is inferred that hearing capacity is not yet properly addressed in the global assessment of elderly people, even though the identification of changes in aging is a public health priority. Sensory, structural and functional changes can limit independence, performance of Basic Activities in Daily Living and social participation, therefore it is necessary to qualify assistance to the elderly at all levels of health care so that it encompasses the singularities and meets these needs.

With regard to the mobility of the elderly, difficulties in locomotion were identified and, of these, almost all used some walking assistance device, such as walkers and walking sticks. With impaired mobility, these elderly people are susceptible to bed restraint, cognitive disorders and risks of falling during hospitalization. In addition, impaired mobility induces a decline of Basic Activities in Daily Living and loss of functionality, which has multifactorial and cumulative causes, such as hospitalization diagnosis, advanced age, prior functional situation, bed rest and use of medications.²¹

It is inferred that dependence for these activities can be experienced by the elderly as stressors that vary in both impact and reaction, as functional losses progress from complex to basic tasks. Thus, this evaluation is important in the hospital context, as the use of evaluation instruments can contribute to the development of an individualized care plan, based on a nursing theory, which encourages the elderly to remain independent in order to perform as many tasks as possible.

The situations and/or conditions identified that trigger feelings of sadness and anguish in the elderly can be considered stressors, since they interfere with well-being. These alterations can be triggered by exposure to certain treatment contingencies, which evoke coping responses. Thus, health professionals and especially nurses must be aware of these situations/conditions in order to diminish them or minimize their impact with a view to maintaining the biopsychosocial stability of the elderly person. Thus, it is possible to identify nursing diagnoses and plan interventions to achieve results that include both health promotion and recovery.

In addition, understanding the elderly person from the five dimensions proposed by Neuman provides the nurse with justifications for clinical judgment, decision making, interpersonal relationships and actions for the application of the nursing process. Thus, it can be said that NSM encompasses all the complexity that involves care for hospitalized elderly people, since the model includes a dynamic and open approach to care, while considering the singularities of each individual in interaction with the environment.⁶

It is underscored that using a nursing theory for theoretical support, meets the Federal Nursing Council's norms, which determine that the nursing process is based on theoretical support to conduct the history, diagnosis, nursing interventions and posterior evaluation of the results obtained.⁵ However, there are limitations in the applicability of nursing theories in care practice, which may be related to the lack of knowledge regarding the potential they offer to direct, innovate and qualify nursing care.

A limitation of the study is the participation of elderly people hospitalized in a single institution. Nevertheless, these reflections on the results obtained are important elements for the nursing care destined for this population.

Conclusion

The study enabled the characterization of hospitalized elderly people in terms of the following dimensions: physiological (gender, age, diagnosis, comorbidities); psychological (changes in mood, feelings and behaviors); sociocultural (marital status, family structure, monitoring during hospitalization, work activity); developmental (years of study, cognitive function); and spiritual (religion, participation in the church, religious support and interference due to hospitalization). These results make it possible to plan interventions to achieve both the promotion and recovery of health.

When understanding the elderly person as an open client system, actively interacting with their environment, the needs assessment and nursing care must be planned and developed with a view to maintaining stability and well-being in the face of stressors. Thus, caring for the hospitalized elderly person implies knowing and identifying their needs and particularities related to senescence and senility, as well as planning results and interventions based on the singularities of each individual. For this, the Nursing Process based on a Theoretical Model, such as the NSM, emerges as a scientific method that qualifies and can contribute to ensure individualized and safe care.

It is considered that the characterization of hospitalized individuals regarding the dimensions of the NSM makes it possible to appreciate, even if partially, the profile of this population. In addition, it enables reflections on the need for care that promotes interaction, in a holistic and integral manner, between the nursing team and the elderly, thereby emphasizing the main contribution and implications for nursing practice of this study. In order to expand the knowledge of Gerontological Nursing, it is suggested that further research be carried out involving hospitalized elderly people using Nursing Models or Theories as a theoretical

framework in order to highlight the potential for innovation and the impact on the practices upon which these studies focus.

References

- 1. Pinheiro FM, Santo FHE, Chibante CLP, Pestana LC. Profile of hospitalized elderly according to Virginia Henderson: contributions for nursing care. Rev Pesq Cuid Fundam. 2016;8(3):4789-95. doi: https://doi.org/10.9789/2175-5361.2016.v8i3.4789-4795
- 2. Sanguino GZ, Previato GF, Silva AF, Meireles VC, Góes HLF, Baldissera VDA. The nursing work in care of hospitalized elderly: limits and particularities. Rev Pesq Cuid Fundam. 2018;10(1):160-6. doi: https://doi.org/10.9789/2175-5361.2018.v10i1.160-166
- 3. Alvarez AM, Sandri JVA. Population aging and the Nursing commitment. Rev Bras Enferm. 2018;71(Suppl 2):722-3. doi: 10.1590/0034-7167-201871sup201
- 4. Benetti ERR. Estressores e variâncias de bem-estar em pessoas idosas hospitalizadas: teoria de médio alcance de enfermagem [tese]. Santa Maria: Universidade Federal de Santa Maria; 2019. 258p.
- 5. BRASIL. Conselho Federal de Enfermagem. Resolução COFEN nº 358, de 15 de outubro de 2009. 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. Rio de Janeiro: Conselho Federal de Enfermagem, 2009. Disponível em: http://www.cofen.gov.br/resoluo-cofen-3582009_4384.html. Acesso em: 19 set. 2020.
- 6. Neuman B. The Neuman systems model. In: Neuman B, Fawcett J. The Neuman systems model. Upper Saddle River (NJ): Pearson; 2011. p. 03-33.
- 7. Caramelli P, Nitrini R. Como avaliar de forma breve e objetiva o estado mental de um paciente? Rev Assoc Med Bras [Internet]. 2000 [acesso em 2020 set 09];46(4):301. Disponível em: https://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-42302000000400018
- 8. Minayo MCS. Amostragem e saturação em pesquisa qualitativa: consensos e controvérsias. Rev Pesq Qual [Internet]. 2017 [acesso em 2019 fev 28];5(7):01-12. Disponível em: https://editora.sepq.org.br/index.php/rpq/article/view/82/59
- 9. Trentini M, Paim L, Silva DMGV. Pesquisa Convergente Assistencial: delineamento provocador de mudanças nas práticas de saúde. 3ª ed. Porto Alegre: Moriá; 2014.
- 10. Lino VTS, Pereira SRM, Camacho LAB, Ribeiro Filho ST, Buksman S. Adaptação transcultural da escala de independência em atividades da vida diária (Escala de Katz). Cad Saúde Pública 2008;24(1):103-

- 12. doi: 10.1590/S0102-311X2008000100010
- 11. Tavares DMS, Nader ID, Paiva MM, Dias FA, Pegorari MS. Associação das variáveis socioeconômicas e clínicas com o estado de fragilidade entre idosos hospitalizados. Rev Latinoam Enferm. 2015;23(6):1121-9. doi: 10.1590/0104-1169.0660.2657
- 12. Bós AJG, Mirandola AR, Lewandowski A, Schirmer CL, organizadores. Perfil dos idosos do Rio Grande do Sul. Porto Alegre: Escola de Saúde Pública; 2015.
- 13. Nascimento RAS, Batista RTS, Rocha SV, Vasconcelos LRS. Prevalência e fatores associados ao declínio cognitivo em idosos com baixa condição econômica: estudo MONIDI. J Bras Psiquiatr. 2015;64(3):187-92. doi: 10.1590/0047-2085000000077
- 14. Campos ACV, Ferreira EF, Vargas AMD, Gonçalves LHT. Healthy aging profile in octogenarians in Brazil. Rev Latinoam Enferm. 2016;24:e2724. doi: 10.1590/1518-8345.0694.2724
- 15. Grden CRB, Ivastcheschen T, Cabral LPA, Reche PM, Rodrigues CRB, Borges PKO. Frailty and cognitive performance of elderly people in outpatient care. REME Rev Min Enferm. 2018;22:e-1086. doi: 10.5935/1415-2762.20180016
- 16. Palencia IPG, Banquett DC, Quintana MC, Villamizar AL, Mendoza YV. Spirituality and religiosity disease. elderly adults with chronic Inv Educ Enferm. 2016;34(2):235-42. doi: 10.17533/udea.iee.v34n2a02
- 17. Reis LA, Menezes TMO. Religiosity and spirituality as resilience strategies among long-living older adults in their daily lives. Rev Bras Enferm. 2017;70(4):761-6. doi: 10.1590/0034-7167-2016-0630
- 18. Rodrigues LR, Nader ID, Silva ATM, Tavares DMS, Assunção LM, Molina NPFM. Spirituality and religiosity related to socio-demographic data of the elderly population. Rev Rene. 2017;18(4):429-36. doi: 10.15253/2175-6783.2017000400002
- 19. Casagranda LP, Santos F, Lange C, Llano PMP, Milbrath VM, Pinto AF. Condições de saúde dos idosos internados com fratura de fêmur. Mundo Saúde. 2016;40(3):319-26. doi: 10.15343/0104-7809.20164003319326
- 20. Costa-Guarisco LP, Dalpubel D, Labanca L, Chagas MHN. Perception of hearing loss: use of the subjective faces scale to screen hearing among the elderly. Ciênc Saúde Colet. 2017;22(11):3579-88. doi: 10.1590/1413-812320172211.277872016
- 21. Carvalho TC, Valle AP, Jacinto AF, Mayoral VFS, Boas PJFV. Impact of hospitalization on the functional capacity of the elderly: a cohort study. Rev Bras Geriatr Gerontol. 2018;21(2):134-42. doi: https://dx.doi.org/10.1590/1981-22562018021.170143

Scientific Editor: Tania Solange Bosi de Souza Magnago Associate Editor: Nara Marilene Oliveira Girardon-Perlini

Corresponding author

Eliane Raquel Rieth Benetti

E-mail: elianeraquelr@yahoo.com.br

Address: Rua Comércio, 2425 Apto 004 Bairro Pindorama, Ijuí/RS, Brazil

CEP: 98700-000

Contributions of the authors

1 - Eliane Raquel Rieth Benetti

Conception or design of the study/research, analysis and/or interpretation of the data, final review with critical and intellectual participation in the manuscript.

2 - Margrid Beuter

Conception or design of the study/research, analysis and/or interpretation of the data, final review with critical and intellectual participation in the manuscript.

3 - Paloma Horbach da Rosa

Analysis and /or interpretation of data, final review with critical and intellectual participation in the manuscript.

4 - Carolina Backes

Analysis and /or interpretation of data, final review with critical and intellectual participation in the manuscript.

5 - Caren da Silva Jacobi

Analysis and /or interpretation of data, final review with critical and intellectual participation in the manuscript.

6 - Francine Feltrin de Oliveira

Analysis and /or interpretation of data, final review with critical and intellectual participation in the manuscript.

How to cite this article

Benetti ERR, Beuter M, Rosa PH, Backes C, Jacobi CS, Oliveira FF. Characterization of hospitalized elderly people according to the Neuman Systems Model: contributions for nursing. Rev. Enferm. UFSM. 2021 [Accessed in: Year Month Day]; vol.11 e8: 1-19. DOI:https://doi.org/10.5902/2179769242086