



Diagnosis and nursing interventions on elderly inpatients*

Diagnósticos e intervenções de enfermagem em idosos hospitalizados

Diagnósticos e intervenciones de enfermería de ancianos hospitalizados

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ABSTRACT

Objective: The present study aims to know the main nursing diagnostics (DE) and to propose the nursing interventions for the main (DE) found in this population. **Methods:** It is a retroactive study, performed on the geriatric wing of a university hospital in the city of São Paulo. The population was defined by the instruments of nursing data collection within the period of June to December/2000. **Results:** The main DE were: Risk of infection (100%), Impaired physical mobility (50,7%), Altered nutrition: less than the corporeal needs (44,7%), self-care deficit (43,4%), impaired skin integrity (41,8%). **Conclusion:** The DE and the interventions, when linked, allow a better solution for the highlighted problem, making nursing easier and maintaining individual care.

Keywords: Nursing diagnosis; Gerontologic Nursing; Aged; Retrospective studies

RESUMO

Objetivo: Conhecer os principais diagnósticos de enfermagem (DE) em idosos e propor as intervenções de enfermagem para os principais DE encontrados nesta população. **Métodos:** Estudo retrospectivo, realizado na enfermaria de geriatria de um hospital universitário da cidade de São Paulo. A população foi constituída pelos instrumentos de coleta de dados de enfermagem no período de junho a dezembro de 2000. **Resultados:** Os principais DE foram: Risco para infecção (100%), Mobilidade física prejudicada (50,7%), Nutrição alterada: menos que as necessidades corpóreas (44,7%), déficit no autocuidado (43,3%), integridade da pele prejudicada (41,8%). **Conclusão:** O diagnóstico de enfermagem e as intervenções quando interligadas, permitem melhor solução para o problema levantado, facilitando a conduta de enfermagem e mantendo a assistência individualizada.

Descritores: Diagnóstico de enfermagem; Enfermagem geriátrica; Idoso; Estudos retrospectivos

RESUMEN

Objetivo: Conocer los principales diagnósticos de enfermería (DE) y proponer las intervenciones para los principales DE encontrados en esta población. **Métodos:** Se trata de un estudio retrospectivo, realizado en el servicio de geriatria de un hospital universitario de la ciudad de Sao Paulo. La población estuvo constituida por los instrumentos de recolección de datos de enfermería en el período de junio a diciembre del 2000. **Resultados:** Los principales DE fueron: Riesgo p/ infección (100%), Movilidad física perjudicada (50,7%), Nutrición alterada: menos que las necesidades corpóreas (44,7%), déficit en el autocuidado (43,3%), integridad de la piel perjudicada (41,8%). **Conclusión:** El DE y las intervenciones cuando están interligadas, permiten mejor solución para el problema levantado, facilitando la conducta de enfermería y manteniendo la asistencia individualizada.

Descriptores: Diagnóstico de enfermería; Enfermería geriátrica; Anciano; Estudios retrospectivos.

* This study was performed in the Geriatric Infirmary of Hospital São Paulo - São Paulo (SP), Brazil.

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INTRODUCTION

Brazil is getting older. Projections by the World Health Organization⁽¹⁾ indicate that, by 2025, Brazil will be rated as the sixth country in the world regarding the number of elderly inhabitants. The inversion of the population pyramid will bring about profound transformations in the social-economic-political-cultural structure of society, which will directly influence the health sector. The increase in chronic and degenerative problems will cause a high degree of disability, which will require aid and support from qualified professionals.

As a specialty, Geriatric Nursing has developed recently and is based on knowledge of the aging process for the bio-psycho-social-cultural and spiritual valuation of elderly people's needs. Service organization and theoretical concepts guide practice, data collection, nursing diagnosis, planning and maintenance of care, intervention, assessments, multi-professional collaboration, research, ethics and professional development as its standards of quality. Therefore, the usage of Nursing Care Systematization (NCS) is a worldwide need for the quality of its practices.

The interest in discovering the main nursing diagnoses for elderly inpatients originated from clinical practice during the first year of the residence specialization course in Geriatric Nursing, and from the need to standardize the NCS in order to facilitate, promote and elaborate proper health care for elderly users.

GOALS

* Identifying the main Nursing diagnoses for elderly inpatients admitted to the Geriatric wing of a University hospital.

* Proposing Nursing interventions for the identified diagnoses.

METHODS

A retrospective study was performed at the geriatric wing of a university hospital in São Paulo City. The study population comprised elderly inpatients, who had their NCS registry sheet filled out between June and December/2000. Secondary data were used, obtained from data collection instruments and from nursing diagnoses, after being approved by the Research Ethics Committee at São Paulo Federal University. The model used for the data collection instrument was created by a group of nursing professionals who were specialists in Gerontology⁽²⁾. The instrument was applied by resident nurses, interns in the geriatric wing, during their first course year. If there were doubts while the instrument was being filled out, or about the elaboration of the NCS, these

were clarified by specific geriatric resident nurses who oversaw them during their internship.

The North American Nursing Diagnoses Association (NANDA 2000)⁽³⁾ taxonomy was used to determine the nursing diagnoses (DE), and the interventions were based on the Nursing Intervention Classification (NIC)⁽⁴⁾.

RESULTS

As shown in table 1, out of 61 elderly patients under study, 33 (54%) were women and 28 men. Age varied from 70 to 95 years.

Table 1 – Distribution of elderly patients under study, according to age and gender. São Paulo, 2002.

| Gender/ Age Bracket (years) | Female | | Male | | Total | |
|--------------------------------|-----------|-------------|-----------|-------------|-----------|--------------|
| | N | % | N | % | N | % |
| 70-74 | 9 | 14,7 | 7 | 11,5 | 16 | 26,2 |
| 75-81 | 13 | 21,3 | 11 | 18,1 | 24 | 39,4 |
| 82-90 | 8 | 13,1 | 8 | 13,1 | 16 | 26,2 |
| 91-95 | 3 | 4,9 | 2 | 3,3 | 5 | 8,2 |
| Total | 33 | 54,0 | 28 | 46,0 | 61 | 100,0 |

Out of 150 nursing diagnostics shown on the NANDA Taxonomy I – 2000, there 22 DE were detected, as shown in Table 2. For this study, the nursing interventions will be discussed or proposed for the diagnoses that attained a frequency equal of 40% or higher.

For each DE, the NIC would offer several intervention suggestions, and those that best suited the elderly inpatient were selected. Some of these had been repeated, having only been highlighted in one DE.

Table 2 – DE distribution according to frequency. São Paulo, 2002

| Nursing Diagnostic | N | % |
|---|----|-------|
| 1. Risk of infection | 61 | 100,0 |
| 2. Impaired Physical Mobility | 30 | 50,74 |
| 3. Altered nutrition: less than corporeal needs | 27 | 44,77 |
| 4. Self-care deficit | 26 | 43,28 |
| 5. Impaired skin integrity | 25 | 41,79 |
| 6. Intolerance to activity | 19 | 32,83 |
| 7. Pain | 17 | 28,35 |
| 8. Sensorial/Perception changes | 15 | 26,86 |
| 9. Risk of injury | 14 | 23,88 |
| 10. Constipation | 13 | 22,38 |
| 11. Diarrhea | 10 | 17,91 |
| 12. Impaired verbal communication | 10 | 17,71 |
| 13. Confusion | 10 | 17,71 |
| 14. urinary Incontinence | 8 | 14,92 |
| 15. Risk of impaired skin integrity | 8 | 14,92 |
| 16. Impaired gaseous exchange | 7 | 13,43 |
| 17. Risk of ineffective respiratory patterns | 6 | 11,94 |
| 18. Anxiety | 6 | 11,94 |
| 19. Risk of caregiver weariness | 5 | 8,95 |
| 20. Decreased peripheral tissular perfusion | 4 | 7,46 |
| 21. Risk of Imbalanced liquid volume | 4 | 7,46 |
| 22. Sleeping patterns disturbs | 4 | 7,46 |

As for Nursing Interventions, NIC has 29 suggestions for this DE. However, those applicable to elderly users are:

- * Promoting daily bathing.
- * Monitoring fluids and electrolytes.
- * Promoting vaccination.
- * Controlling exposition to communicable diseases.
- * Offering nutritional intake.
- * Observing the aspect of the skin.
- * Monitoring vital signs.

Of the 49 suggestions proposed by NIC, 4 are applicable to the elderly:

- * Moving immobilized elderly carefully.
- * Promoting passive exercise.
- * Adequate positioning in bed or chair.
- * Promoting body mechanics.

As to nursing interventions, of 39 suggestions by NIC, only 7 were appropriate for the elderly:

- * Promoting fluid balance.
- * Fractioning the diet.
- * Controlling swallowing disorders.
- * Observe weight gain.
- * Care for users who receive diet through forced or parenteral nutrition.
- * Controlling hypoglycemia or hyperglycemia.

The nursing intervention suggestions of NIC for this DE were:

- * Performing or helping with bathing.
- * Performing oral, eye, ear, hair and intimate hygiene.
- * Controlling pain.
- * Helping with dressing.
- * Assisting and helping with fluid and food ingestion.
- * Encouraging the user to perform self-care.

The NIC proposes 46 suggestions for this DE, but only 7 are applicable to the elderly:

- * Reducing bleeding.
- * Easing pressure.
- * Moisturizing the skin.
- * Promoting suitable nutritional intake.
- * Preventing pressure ulcers.
- * Treating pressure ulcers and existing wounds.
- * Stimulating circulation.

As for the patterns of human response, the most commonly found were: Exchanging (54.55%), Moving (18.19%), Feeling (9.10%), Knowing (4.61%), Noticing/Perceiving (4.61%), Relating/Associating (4.61%) and Communicating (4.61%), according to Table 3.

Table 3 – Distribution of human response patterns, according to NANDA taxonomy I in elderly inpatients, São Paulo, 2002.

| Human response pattern | n of users | % of users |
|------------------------|------------|--------------|
| Exchanging | 12 | 54,5 |
| Moving | 4 | 18,1 |
| Feeling | 2 | 9,0 |
| Knowing | 1 | 4,6 |
| Perceiving/Noticing | 1 | 4,6 |
| Relating/Associating | 1 | 4,6 |
| Communicating | 1 | 4,6 |
| Total | 22 | 100,0 |

DISCUSSION

The data reveal that, regarding the gender variable, there was a higher distribution toward the females (54%) when compared to males (46%). In 1995, for every 100 women over 60 years of age, there were 81 men of the same age. Women live longer, but they are also lonelier, show lower levels of education and income and a higher frequency of health complaints⁽⁵⁾.

Risk of Infection diagnostics is defined by NANDA as “a state where an individual has an increased risk of being invaded by pathogenic organisms”, being identified in 100% of the population. The physiological alterations of aging, especially on the immune system and the delay on the tissue healing were fundamental characteristics for this diagnostic. Being admitted to a hospital exposes the elderly inpatient to invasive procedures like catheterization, venipuncture, diagnostic exams such as endoscopy and colonoscopy, presenting a high risk of acquiring an infection. Hospital admittance itself might cause cross-infection, even if such procedures do not occur.

Of the 61 users, 30 (50.74%) presented Impaired physical mobility diagnostics, which is defined as a limitation of independent and voluntary physical movement of the body or one or more extremities, characterized by postural instability during the execution of everyday activities, limited amplitude of movement, related to medication, discomfort, sensorial-perceptual, neuromuscular and musculo-skeletal damage, cognitive damage, malnutrition, contraction or stiffening of the joints, loss of bone structure integrity and presence of acute or chronic degenerative ailments.

For the Altered nutrition: less than corporeal needs DE, present in 44.77% of clients, whose definition is a state in which an individual experiences an insufficient ingestion of nutrients to satisfy the metabolic necessities, the marked characteristics on the elderly are: weakness of the muscles needed for chewing or swallowing; report or evidence of lack or inadequate ingestion of food; weight loss with adequate ingestion of food and report of the feeling of altered taste. Aging causes varied degrees of

sensorial alterations in the human organism. Decreased sense of smell associated to the reduction of the amount of taste buds might cause reduction in appetite and thirst, provoking organic imbalances with weight loss.

The Self-care deficit DE was present in 43.28% of the users. It is defined as an impaired capacity of performing or completing eating activities, self-bathing or hygiene, dressing up, toileting and using instruments. The inability or dependence implies in high costs to the health system. In the greater São Paulo the elderly make use of hospital services more intensively than other age groups, either because of longer periods in the hospital, or because of a higher readmittance frequency that they are subject to⁽⁶⁾.

The skin is the organ that most apparently shows signs of aging. With the loss of sustaining tissue, subcutaneous fat, reduction of hair and sweat and sebaceous glands, physiologically the elderly has a skin that is dried, fragile, lacking in elasticity and turgor and more prone to injury, itching and infections. In this study, 41.79% had the Impaired skin integrity DE, given the alterations in this organ associated to the factors of physical mobility, nutrition, sensorial perception and humidity/moisture.

These human response patterns were expected because they are characteristic of the biomedical model followed inside the hospital institution. Since the data collection instrument was applied by non-specific resident nurses in the Gerontology area and the main focus in the hospital environment is healing or controlling diseases, the pattern Exchanging, which involves the reciprocal act of receiving and covers DE like Altered nutrition: less than body requirements, risk for infection and impaired skin integrity, among others; and the pattern Moving, which involves the DE Impaired physical mobility and Self-care deficit, have been more frequent than the Pattern Relating/Associating, which involves the establishment of social bonds and entails DE like Social isolation, Loneliness and Caregiver Role Strain, not found in this study.

CONCLUSION

Nursing diagnoses have been examined and represent one of the main steps in the NCS because they contribute to the identification of the user's problems and subsequent elaboration of the nursing interventions.

The DE and the interventions, when linked, permit a better solution of the identified problem, making nursing tasks easier and maintaining individual care.

The classification of nursing diagnoses and interventions in line with a taxonomy is used to standardize and guide nursing activities. It should be highlighted that both NANDA and NIC taxonomies offer a series of choices, preserving the nurse's autonomy when it comes to choosing the best course of action for the user.

Therefore, we believe that considering the interventions developed in this classification for the most frequent nursing diagnoses in elderly inpatients hospitalized in geriatric wings and comparing them to our reality will contribute to the strengthening of professional practice.

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