

Planejamento da alta hospitalar no pós-operatório de idosos: estudo de casos múltiplos

Discharge planning in post-operative of elderly: multiple cases study

Planificación de alta en el postoperatorio de ancianos: estudio de caso multiple

Shimmenes Kamacael Pereira¹, Rosimere Ferreira Santana², Valéria Santos Conceição Morais³, Thais da Silva Soares⁴, Deborah Marinho da Silva⁵

How to quote this article:

Pereira SK, Santana RF, Morais VSC, et al. Discharge planning in post-operative of elderly: multiple cases study. Rev Fund Care Online. 2016 out/dez; 8(4):4949-4955. DOI: <http://dx.doi.org/10.9789/2175-5361.2016.v8i3.4949-4955>

ABSTRACT

Objective: To analyze the results of planning postoperative hospital discharge in the elderly. **Method:** This was a multiple cases study with a quantitative approach using the following research techniques: semi-structured interviews, observation, documental survey and follow-up by telephone in a sample of 12 elderlies. **Results:** Reports of significant improvement in infection control were observed after hospital discharge, 100% of the sample demonstrated the ability to identify at least two risk factors for infection. There was an increased adherence to the therapeutic regimen with a significant increase of 83.4% of outpatient medical care and maintenance of the use of prescribed medications. **Conclusion:** It is considered that the execution of the planning of postoperative hospital discharge follow-up combined with education demonstrates significant results in surgery recovery.

Descriptors: Elderly, Discharge Planning, Surgery Nursing, Telenursing, Nursing Assessment.

¹ RN. Master's degree in Sciences of Health Care, Aurora Afonso Costa Nursing School, Fluminense Federal University. Specialist in Surgical Nursing.

² PhD in Nursing. Adjunct Professor, Medical Surgical Nursing Department, Aurora Afonso Costa Nursing School, Fluminense Federal University.

³ RN. Specialist in Gerontological Nursing, Aurora de Afonso Costa Nursing School, Fluminense Federal University.

⁴ RN. Specialist in Gerontological Nursing, Aurora de Afonso Costa Nursing School, Fluminense Federal University.

⁵ RN. Specialist in Gerontological Nursing, Aurora de Afonso Costa Nursing School, Fluminense Federal University.

RESUMO

Objetivo: Analisar os resultados do planejamento do cuidado de enfermagem no pós-operatório de idosos hospitalizados. **Método:** Trata-se de estudo de casos múltiplos, de abordagem quantitativa. Utilizou-se das técnicas de pesquisa: entrevista semiestruturada, observação, levantamento documental e acompanhamento pelo telefone. Amostra composta por 12 idosos. **Resultados:** Após a alta hospitalar, houve relato de melhora significativa no controle da infecção, 100% da amostra demonstrou capacidade de identificar no mínimo dois de fatores de risco para infecção. Houve maior aderência ao regime terapêutico com aumento significativo de 83,4% do acompanhamento médico ambulatorial e manutenção da utilização das medicações prescritas. **Conclusão:** Considera-se que a execução do plano de alta no segmento pós-operatório, associado à educação, demonstram resultados significativos à recuperação cirúrgica.

Descritores: Idoso, Planejamento da Alta, Enfermagem Cirúrgica, Telenfermagem, Avaliação em Enfermagem.

RESUMEN

Objetivo: Analizar los resultados del planeamiento del cuidado de enfermería en el post-operatorio de ancianos hospitalizados. **Método:** Se trata de estudio de casos múltiplos, de enfoque cuantitativo. Se utilizó de las técnicas de investigación: entrevista semi-estructurada, observación, levantamiento documental y acompañamiento por teléfono. Muestra compuesta por 12 ancianos. **Resultados:** Después del alta hospitalario, hubo relatos de mejora significativa en el control de la infección, 100% la muestra demostró capacidad de identificar por lo mínimo dos factores de riesgo para infección. Hubo mayor adherencia a régimen terapéutico con aumento significativo de 83,4% del acompañamiento médico ambulatorial y mantenimiento de la utilización de las medicaciones prescritas. **Conclusión:** Se considera que la ejecución del plano de alta en el seguimiento post-operatorio, asociado a educación demuestra resultados significativos de la recuperación quirúrgica.

Descriptorios: Anciano, Planeamiento del Alta, Enfermería Quirúrgica, Telenfermería, Evaluación en Enfermería.

INTRODUCTION

Guidelines for hospital discharge aim at following up the treatment proposed by the healthcare team from admission to home care. Patient education and discharge planning are emerging for the perioperative nurse given the increasing emphasis on home care, reducing hospitalization time, the growing number of outpatient surgical procedures and controlling hospital infection.¹

Such actions become complex in the elderly due to the risk of fragility imposed by morbidities and dependency for self-care. The extension of guidelines to caregivers or companions is often needed because of difficulties associated with other limitations in elderlies in understanding and implementing these guidelines.²

Aging also brings morpho-physiological alterations that are expected in the cardiovascular, respiratory, cutaneous, reproductive, musculoskeletal, genitourinary, gastrointestinal, nervous, immune and sensory systems.

There are changes in the skin, which becomes thin and wrinkled with reduced cell renewal and degradation of elastin and collagen in the connective tissue, making it more rigid and less elastic, thus, changing the healing process.³

These alterations in association with harms caused by a surgical procedure can delay the surgical recovery process, hence the need for special attention to planning hospital discharge in the elderlies.³ However, it is noteworthy that the impact of such alterations in the individual organism is particular given the variation in the physiological, functional, cognitive, and psychosocial health.

Therefore, nurses need to associate gerontological principles with surgical knowledge providing perioperative care that takes into account the functional capacity of the elderly. They need to focus on planning the discharge to include education and training of the elderly and family/caregivers for home care.

This assistance can take place continuously from the units of surgical centers, post-anesthesia care and post-surgery wards, and in association with other health professionals.¹ It is worth noting that the care and evaluation after surgery should continue at the ambulatory, in the patient's home, and in the clinic through guidance in writing or by telephone.⁴

Thus, the teleconsultation, or telephone consultation, telemonitoring, telecare or telenursing would be an increasing communication modality in postoperatively nursing care follow-up. It essentially ensures and improves access to health care, and has the characteristics of information exchange providing a bond that leads to psychosocial and emotional security within the professional-patient communication.⁵

Given these assumptions, the guiding question is: what would be the results obtained from the execution of systematic planning for hospital discharge of elderly surgical patients? The following objective was delimited to answer this question: to analyze the results of the postoperative nursing care planning for hospitalized elderlies.

METHOD

This was a multiple case study with a quantitative approach. The following research techniques were used: semi-structured interview, field observation, and documental survey in medical charts. The interviews were conducted by the researcher and recorded in MP3 files for later transcription; in addition, telephone follow-up (telenursing) was conducted after hospital discharge.

The sample inclusion criteria were: be in the preoperative stage, be in biological and psychological conditions for verbal expression; if the patient had a physical or mental alteration, a direct or family caregiver should also agree to participate and sign the Voluntary Informed Consent Form; and answer the call in the telenursing including a maximum of three attempts. The exclusion criteria were: a patient who was not submitted to the surgical procedure; was discharged before the implementation of the discharge plan; did not

answer the phone in the telenursing consultations, or refused to participate in the study at any time.

The sample consisted of 12 female patients, aged 60 years and older, hospitalized during the perioperative period in the surgical clinic of a large university hospital located in Niterói/RJ, Brazil, who received nursing education intervention for specific and detailed discharge, starting at the preoperative stage, permeating the other perioperative stages, and until the discharge time i.e., the patient received intervention/systematized nursing care between October of 2011 and March of 2012.

The nursing care focused on patient education and preparation for hospital discharge and telemonitoring in order to evaluate the effectiveness of the provided guidance during hospitalization.

The assumptions for the steps for clinical reasoning (analysis, judgment, and data synthesis) were used in the data analysis.⁶ Thus, the categorization of data organized in a logical and systematic manner, the determination of diagnostic hypotheses, and formulation of nursing diagnosis according to NANDA-Internacional were necessary.⁷ Subsequently, interventions and activities recommended by the NIC - Nursing Intervention Classification⁸ were proposed following the selected nursing diagnoses. The classification of nursing outcomes according to the NOC - Nursing Outcomes Classification was used for the evaluation of the planning efficiency and efficacy.⁹

It is worth noting that this study received a favorable opinion of the local Ethics Committee in Research under number CAAE- 0015.0.258.000-09 protocol, which is consistent with the ethical and legal specifications of Resolution 466/12 from the Ministry of Health. Patients' identities and information about their privacy were kept confidential.

RESULTS

The sample age ranged between 62 and 90 years, with an average of 64.4 years. A total of five (41.7%) were married, 4 (33.3%) were widows, 2 were in a stable relationship (16.6%), and 1 (8.4%) was divorced. Most were retired, 7 (58.4%). All were from the State of Rio de Janeiro from the cities of Niterói, São Gonçalo, and Itaboraí. They were admitted in the following specialties: general, neurological, thoracic, gynecological, and urological surgery.

The distribution of surgical procedures was: 3 (25%) Thyroidectomy, 1 (8.4%) Vertebral arthrodesis, 1 (8.4%) Pleuroscopy, 1 (8.4%) Colecisto Jejunostomy, 1 (8.4%) Laparoscopy, 1 (8.4%) Laparotomy and Gastrostomy, 1 (8.4%) Wertheim Meigs, 1 (8.4%) Resection of intracranial tumor, 1 (8.4%) Left Pielolotomy, and 1 (8.4%) Excision of inguinal screen. It is noteworthy that 3 (25%) elderly were readmitted, i.e., they were submitted to procedures for the resolution of previous surgical complications.

Only 58.4% of the group revealed having knowledge about the surgical procedure performed; there were still 41.6% of ignorance displayed by patients. This can be explained by both difficulties of understanding or cultural status, or even lack of proper communication between the health professional and patient.

The nursing diagnosis defined as relevant in more than 50% of cases was *Risk of Infection* evidenced by the presence of risk factors: insufficient knowledge to prevent exposure to pathogens, invasive procedures, and increased environmental exposure to pathogens.

There are similarities between the nursing diagnoses in the perioperative care plan and planning for the discharge of patients with surgical conditions, which allows the construction of generalized plans. In this study, the building of individualized care plans was chosen considering the specifics of patients and surgeries.

Figure 1 shows the example of a model of nursing care plan prepared for one postoperative elderly patient. Its standardization was based on the NANDA-I, NIC, and NOC taxonomies, a default language to list diagnoses, enumeration of nursing prescriptions, and evaluation of the clinical evolution of real clinical and/or potential problems.

Figure 1 - Planning for postoperative elderly care - Niterói/RJ, 2012

NANDA I	NOC (Initial Results)	NIC (Interventions)	Evaluation criteria	NOC (Final Results)
Risco de infecção	Knowledge: Infection Control	1 - Advise on appropriate techniques for handwashing. - Guiding visitors in handwashing when entering and leaving the ward. - Stimulate adequate nutritional and water intake. - Ensure the proper technique in the care of the surgical incision. - Advise patients and families about signs and symptoms of infection and the time to report to the health care provider.	Verbal Report Observation	3
Healing of wounds: First intention	3	- Monitor the healing process at the incision site. - Facilitate the patient's vision of the incision. - Advise the patient on how to care for the incision in the shower. - Clean the area around the incision with an appropriate cleaning solution. - Clean from the cleanest area to the least clean. - Teach the patient how to minimize stress	Physical Exam Observation Verbal Report	5

(To be continued...)

(Continuation)

NANDA I	NOC (Initial Results)	NIC (Interventions)	Evaluation criteria	NOC (Final Results)
Integridade da pele prejudicada	Tissue Integrity: Skin and Mucosae	3 <ul style="list-style-type: none"> - Examine the condition of the surgical incision. - Monitor the skin temperature - Monitor for signs of infection (e.g., fever, pain, and swelling). - Encourage water intake - Encourage a proper diet to balance electrolytes in the elderly. 	Physical Exam	4
	Preparation for Discharge: Independent Living	2 <ul style="list-style-type: none"> - Assist patient/family/caregiver to prepare for the discharge. - Collaborate with doctors, patient/family/caregiver and other members of the health team in planning for continuity of care. - Identify the understanding that the patient and primary caregiver have about the knowledge or skills required after discharge. - Identifying the educational needs of the patient about care after discharge. - Develop a maintenance plan for follow-up after discharge. 	Verbal Report	4

An increase in the NOC score used to evaluate the results was observed, especially with regard to the level of knowledge and practices that reduce and contribute to the transmission of nosocomial infections.

Regarding the ability to describe the recognition of signs and symptoms of infection and activities required to increase resistance to infection, there was a progressive increase in the scores when compared to scores in the first interview. Therefore, the implementation of guidelines for the prevention of possible injuries and the early identification of complications were effective in the postoperative period.

The checklist evaluation of knowledge of participants about the risk factors for infection demonstrated how this intervention enhanced the knowledge expressed by the elderly/companions between the first meeting and the later teleconsultation. It thus allowed the following-up analysis of the effectiveness of the implemented intervention in the discharge planning as explained in Figure 2.

Figure 2 - Distribution of answers in the check-list about knowledge of risk factors for infection. Niterói/RJ, 2012

CHECK LIST	1st interview	TELENURSING
Tell techniques or practices that reduce the transmission of infectious agents and control		
Eating	7	12
Hand hygiene	9	12
Body hygiene	4	7
Not sharing personal items	2	3
Cite types of nutrients that help in healing		
Carbohydrates	1	3
Proteins	5	6
Vitamins	5	6
Amount of water ingested daily		
1 to 3 cups	4	6
3 to 6 cups	2	-
6 or more	2	4
Product type used in dressing the surgical wound		
70% Alcohol	3	7
Povidone	3	2
Others	2	2
Knowledge of signs and symptoms of infection		
Fever	2	9
Pain	2	3
Purulent secretion	5	9
Others	3	3
Use of prescribed medications		
Yes	12	12
No	-	-
Has continued with treatment on an outpatient basis		
Yes	-	10
No	6	2

Thus, after hospital discharge, in the telenursing, patients demonstrated 100% capacity to identify at least two risk factors when asked about risks for infection.

When asked about the practices and techniques that reduce the transmission of infection in the first meeting, the answers were: 7 (58.4%) indicated eating, 9 (75%) indicated hand hygiene, 4 (33.3%) indicated body and oral hygiene in addition to the two previous items, and only 1 (8.4%) did not identify any of the items. However, in a second meeting after the implementation of care, they were able to describe three correct items, demonstrating the importance of guidelines.

When asked to describe the possible signs and symptoms of infection, only 1 (8.4%) cited "fever, bruising, swelling, secretion, and redness"; however it should be noted that this elderly had exercised her professional life as a nursing technician. The other participants could not describe possible foci of infection, indicating the need for guidance on infection and the time to return to the doctor to elderly

with caregivers. This was an item frequently reported in the meetings and telenursing.

The adherence to the therapeutic regimen through the significant increase of 83.4% in the outpatient medical care was observed, including the use of prescribed medications and follow-up in the provided guidelines.

A total of 41.7% answered identifying foods compared to 30.5% in the first moment. The low efficacy of nutrition and dressing care might be explained by the conflicting guidelines given by professionals. According to the interviews, both patients and their families expected a formal orientation from professionals for their hospital discharge:

They did not tell me anything yet. I believe that they will come by at the discharge time. I believe! (62 years old, family member)

The anguish and anxiety are noticed in the speeches of patients and family members as the result of an absence of a discharge plan. Failing to inform patients and family members about the signs and symptoms of infection and how to prevent them can increase the chances of delayed surgical recovery.

To consider that each patient has his own characteristics and that those can lead to different risks of acquiring nosocomial infections support the need for careful and individual evaluation and therefore, the construction of specific discharge plans.

Hence, the execution of a systematic plan of care for the patient's discharge becomes effective as patients become able to identify risk factors. This awareness helps in the identification of early symptoms from an injury in the surgical recovery, lowering costs, and decreasing the incidence of complications that may culminate in readmissions.

DISCUSSION

Given the growing need to perform surgical procedures in the elderly population and facing the physiological alterations resulting from aging, the use of appropriate measures in the pre, intra, and post-operative periods is necessary for an attempt to reach satisfactory results. These measures need to be implemented not only taking into account the period of hospitalization, but also the concerns about guidelines regarding home care.¹⁰

Within this context, planning the hospital discharge is a complex aspect of care that includes the completion and documentation of the five stages of the Nursing Process (research, diagnosis, planning, implementation, and evaluation). Nurses should perform care and educational activities with customers including discharge guidelines. If this is not documented in writing, the team communication and monitoring the patient's learning can be hindered.¹¹

The guidelines should be recorded in a specific form in duplicates, the first to be delivered to the patient and the second to be attached to his medical chart.¹² Guidelines contained in the discharge plan shall be transmitted to the patient before his departure so his understanding of the information can be evaluated and doubts can be clarified. It is assumed further that the discharge plan can be started before the formal discharge when the patient demonstrates both physiological and psychosocial conditions for education and training.

Thus, education for the discharge can be initiated in the preoperative phase in order to minimize anxiety and risk of infection¹ to the extent that the patient acquires knowledge about how to prevent complications. Infections in the surgical site bring impact to the lives of individuals triggering negative feelings that may be related to dressing, wound healing, pain, hospital stay, recovery, and self-image.¹³

The guidelines provided during hospitalization until discharge can be understood or interpreted in a wrong way due to concerns about the return to home and level of stress that can compromise learning and continuity of treatment performed after discharge.¹⁴

However, planning the discharge remains problematic with controversial issues as to its effectiveness such as the time of introduction and methodology. Although nurses adopt the role of coordinating the discharge planning process, in the practice, written guidelines provided to patients and family members have been diminished to ensure the continuity of care and are mostly provided by the medical team.⁴

A study on the role of nurses in the hospital discharge observed that patients often did not receive guidance for home care, particularly with regard to the care of a surgical wound, eating, return to work, sexual activity, use of medications, special restrictions, and others. Moreover, when guidelines were provided, there was no record of the practice in medical charts, i.e., systematically contributing to the 'invisibility' in the practice of this profession. Difficulty in communication among health professionals was identified as a contributing factor to the gaps in the implementation of discharge plans.¹⁵

Despite the similarities between the needs of guidelines for hospital discharge and infection prevention, particularities occur. Thus, the planning must be individualized because standard or general discharge plans with routine guidelines tend to be nonspecific and with a low-resolution rate, not reaching the patient in his biological, psychosocial, and psychospiritual dimensions.¹⁶ Therefore, we recommend the implementation of specific guidelines for each case.

Health education is part of the nurse's role and is considered an instrument that provides security, reduced cost, efficacy, and quality of health care since the mid-nineteenth century. Patients and families have the right to receive health education to ensure the continuity of care after hospital discharge.¹

The society has undergone changes in the family context every day, and often elderly are not accompanied by a family member.¹⁷ However, by no means should these changes disrupt the link between the nursing professional and responsible caregiver.

Inadequate preparation of patients and families may explain the low yield in nutrition and care with dressings. Therefore, the lack of knowledge and information related to home care contributes to readmission due to problems that could have been prevented.¹⁶

However, the continuity of home treatment and the reduction of anxiety and insecurity in the patient depends largely on the guidance received at the discharge. This guidance combined with oral and written information, in addition to telephone follow-up made by nurses trained in communication skills can facilitate the performance of home self-care^{4,12,18} as corroborated in this study.

The contribution of the use of classification instruments in the planning of patient care needs at home is also emphasized. These instruments standardize the language and estimate improvement in the inter-professional communication.

CONCLUSION

The analysis of the nursing process from scores of nursing outcomes proposed by the NOC demonstrates the results of the implementation of the discharge plan. Similarly, the evaluation of the checklist showed a growing and consistent increase in the effectiveness of responses acquired over the admission process that lasted until the evaluation through telenursing at home.

The use of the classification of nursing outcomes (NOC) allowed the evaluation of learning; increased adherence to treatment; decreased anxiety; and early identification of signs of alterations in the recovery of health. Although the implementation of a systematic care plan is an intensive task that requires time, availability, training in educational practice, and systematization of assistance, the method used is recommended because it demonstrated the systematic development of individual discharge plan through the use of classifications, checklist, and telenursing.

It is noteworthy that the discharge plan is needed for the geriatric population that requires detailed attention from nurses in previewing enhancers of injuries during surgical recovery and integration of a family member in the continual home care.

Finally, studies with robust samples and experimental delimitation using a systematic and individual planning method demonstrated in this study could contribute to confirming the findings and its incorporation into the nursing practice.

REFERENCES

1. Meeker MH, Rothrock JC. Alexander: Cuidados de enfermagem ao paciente cirúrgico. 13 ed. Rio de Janeiro: Guanabara Koogan, 2007.
2. Mendonza IYQ, Peniche ACG. Conhecendo o perfil do idoso cirúrgico. *Saúde Coletiva*. 2008; 30(6):104-8.
3. Eliopoulos C. *Enfermagem gerontológica*. 7. ed. Porto Alegre: Artmed, 2011.
4. Mata LRF, Napoleão AA. Nursing interventions for patients discharged from prostatectomy: an integrative review. *Acta paul. enferm.* [online]. 2010; 23(4):574-9.
5. Innes M, Skelton J, Greenfield S. A profile of communication in primary care physician telephone consultations: application of the Roter Interaction Analysis System. *Br J Gen Pract*. 2006; 56(526):363-8.
6. Risner PB. *Diagnosis: analysis and synthesis of data*. In: CHRISTESEN PJ, KENNEY JW. *Nursing process application of conceptual models*. St. Louis: Mosby, 1995.
7. Herdman TH (Ed.). *NANDA International nursing diagnoses: definitions and classification 2012-2014*. Porto Alegre: Artmed, 2012.
8. Bulechek GM, Butcher HK, Dochterman JM. *Classificações das intervenções de enfermagem NIC (Tradução Soraya Imon de Oliveira et al)*. Rio de Janeiro: Elsevier, 2010.
9. Moorhead S, Johnson M, Maas ML, Swanson E. *Classificação dos resultados de enfermagem – NOC (tradução de Regina Machado Garcez et al)*. Rio de Janeiro, Elsevier, 2010.
10. Towmsenrd Jr CM, Beauchamp RD, Evers BM, Mattox KL, et al. *Sabiston: Tratado de cirurgia*. Trad: Débora Rodrigues Fonseca, et al. Rio de Janeiro: Elsevier, 2010.
11. Suzuki VF, Carmona EV, Lima MHM. Planning the hospital discharge of patients with diabetes: the construction of a proposal. *Rev. esc. enferm. USP* [online]. 2011; 45(2):527-32. ISSN 0080-6234.
12. Marra CC, Carmagnani MIS, Afonso C, SALVADOR ME. Orientação planejada de enfermagem na alta hospitalar. *Acta Paul. Enf*. 1989; 2(4):123-7.
13. Carvalho ICBM, Souza NL, Medeiros ATN. Fatores predisponentes para infecção da ferida operatória pós-cesárea: uma revisão integrativa. *J. res.: fundam. Care. Online* 2014. Abr./jun. 6(2):812-20.
14. Sebastiani RW, Maia EMC. Contribuições da psicologia da saúde-hospitalar na atenção ao paciente cirúrgico. *Acta Cirúrgica Brasileira*. 2012; 20(Supl I):50-5.
15. Pompeo DA, Pinto MH, Cesarino CB, Araújo RRDF, Poletti NAA. Atuação do enfermeiro na alta hospitalar: reflexões a partir dos relatos de pacientes. *Acta paul. enferm.* [online]. 2007; 20(3):345-50.
16. Pagliarini FC, Perroca MG. Use of a patient classification instrument as a guide to plan nursing discharge. *Acta paul. enferm.* [online]. 2008; 21(3):393-7.
17. Marin MJS; Angerami ELS. Caracterização de um grupo de idosas hospitalizadas e seus cuidadores visando o cuidado pós-alta hospitalar. *Rev. Esc. Enf. USP*. 2002; 36(1):33-41.
18. Caljouw MAA, Hogendorf-Burgers ME. *Gynotel: telephone advice to gynaecological surgical patients after discharge*. Blackwell Publishing Ltd, *J Clin Nurs*. 2010; 19(23):3301-6.

Received on: 21/05/2014

Reviews required: No

Approved on: 17/09/2015

Published on: 01/10/2016

Mailing address:

Rua 8 de maio, nº 44, casa 04. Centro/ Três Rios.

E-mail: shimmeneskp@gmail.com

ZIP code: 25807-130