Original Article

Nursing registries of educational actions for patients submitted to hip arthroplasty

Registros de enfermagem acerca das ações educativas para pacientes submetidos à artroplastia de quadril

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ABSTRACT

A retrospective, descriptive study of quantitative approach, aimed to identify nursing registries of educational actions for patients submitted to hip arthroplasty. The investigation was conducted in a university hospital in the South of Brazil, with a sample of 112 records from admitted patients. Data were collected through a checklist in June of 2013, and statistically analyzed. The educational registry was present in 60 (53%) records. Regarding the content, the post-surgery care 36 (53%), mobilization 23 (20,5%) and bed exit 21 (18,8%) were prevalent and were found in a total of 56 (50%) records on the Nursing Evolution document. Although nursing registries present aspects related to patient's education, better results could be obtained with the intervention operationalization, linked to nurse's permanent education.

Descriptors: Nursing Records; Health Education; Arthroplasty, Replacement, Hip; Orthopedic Nursing.

RESUMO

Estudo retrospectivo, descritivo, de abordagem quantitativa, cujo objetivo foi identificar os registros de enfermagem acerca das ações educativas realizadas para pacientes submetidos à artroplastia de quadril. A investigação foi realizada em um hospital universitário do sul do Brasil, com uma amostra de 112 prontuários de pacientes internados. Os dados foram coletados por meio de um *checklist,* em junho de 2013, e analisados estatisticamente. O registro educativo esteve presente em 60 (53%) prontuários. Quanto ao conteúdo, foram prevalentes os cuidados pós-operatórios 36 (32%), mobilização 23 (20,5%) e saída do leito 21 (18,8%), encontrados em 56 (50%) do total de prontuários no documento Evolução de Enfermagem. Apesar de o registro de enfermagem apresentar aspectos relacionados à educação do paciente, melhores resultados poderiam ser obtidos com a operacionalização dessa intervenção, atrelada à educação permanente dos enfermeiros.

Descritores: Registros de Enfermagem; Educação em Saúde; Artroplastia de Quadril; Enfermagem Ortopédica.

INTRODUCTION

Complete and insightful nursing registries favor quality assistance. These registries support professionals regarding ethical and legal aspects on the patient's record. They estimate the costs of care, promote higher safety in assistance, facilitate communication, besides giving visibility to the attributions of the nursing team[1].

In clinical practice, the patient and family or caregivers' education are inherent to care, and it should be registered. For an effective education, it is indispensable for nurses to assess learning needs, in a way to determine not only the content to be thought, but the most safe way to guarantee learning[2].

In orthopedic nursing, it is important for patients submitted to hip arthroplasty (HA), to be educated for self-care during perioperative period. Although it is pointed as an effective procedure that improves quality of life, complications related to infection, pain, pulmonary complications, deep vein thrombosis, immobility and prosthesis dislocation are frequent[3]. These complications post-surgery during in-hospital period as well as at home, can interfere on the patient's return to daily activities, as well as to delay recovery.

In this sense, nurses can act as health promotion agents when implementing educational actions that influence the reduction of these complications occurrence. Therefore, these actions, when not registered on the patient's record, stays invisible on the care plan, complicating assistencial measures development.

Educational actions constitute a group of interventions aimed to promote knowledge of patients, family or caregivers about a certain aspect; to develop the ability to critically analyze, organize and modify their reality; focusing in different circumstances of care[4]. The registry of this practice is configured as a tool to favor communication between professionals about what is the health education object during patients' admission.

According with the Joint Commission International, an organ that certifies hospital accreditation internationally, a quality education registry contemplates assessment of needs, it has an efficacious and efficient education plan and the education provided is comprehended[2]. Flaws in information registration on records is constituted of limitations in a study about preventive measures for infections during perioperative period of HA, configuring a challenge for the nurse to plan educational actions[5].

From these considerations, we designed the present investigation. As a premise, we believe that the nursing registries quality permeates clinical aspects of care, and that through education nursing assumes an important role on patient's treatment and preparation for discharge. Patients submitted to HA need more time spent in nursing assistance. Educational actions then become fundamental tools, and should be incorporated daily in a way to favor the progressive reduction of patient dependence and it can avoid possible re-admissions[6]. In this sense, the question arises: What are the aspects related to education that are registered on the records of patients submitted to Hip Arthroplasty?

In this perspective, this study has an objective to identify registries about educational actions for patients submitted to Hip Arthroplasty.

METHODS

A retrospective, descriptive study with quantitative approach, conducted in a university hospital linked to a university in the South region of Brazil. The institution has about 800 beds, distributed in more than 60 specialties and was recognized as an academic center of excellence for health quality and patient's safety by the Joint Commission International in 2013.

The study population was constituted by many electronic records of patients submitted to Hip Arthroplasty, hospitalized in Services of Nursing Surgery. This service, represented by seven units of admission of adult patients, presented a total of 221 beds. Its team was constituted by 250 collaborators that attended patients 24 hours per day, distributed in 62 nurses and 189 nursing

technicians and assistants. In these units, different surgical specialties were contemplated; from those, four attended patients with orthopedic problems during the period of data collection.

The non-probabilistic sample was defined based in the totality of surgeries conducted between December of 2012 and May of 2013, in a period when 115 patients were submitted to this procedure. In the institution where the study was conducted, there was a motivation to value the systematized registry of educational actions, once it was developed and implemented in a specific field for this matter on the patient's electronic record. The records in which nursing assessments registries showed that patients were not apt to receive educational actions were excluded, that is, for presenting an altered mental state and for being unaccompanied. At last, 112 records were included.

For data collection, a checklist instrument was created containing variables related to patients' characteristics; presence of educational action; educational content, delivery registry of the guide with specific orientations for patients submitted to HA[7]; about the individual plan for patient's education, including the family or caregivers; and the registry of comprehension confirmed by the patient. To define data collection logistics the authors of the present study conducted a pilot test, a content validation, and instrument' face.

Data were collected during June of 2013, by the researchers, at the Medical Archives Service and Health Information from the hospital. The documents composing the Nursing Process were assessed, including peri-operative service until hospital discharge, conducted by assistencial nurses and nursing academics. The study did not intend to categorize these registries.

To build spreadsheets and storage data, we used the software Excel 2010 and we conducted the analysis in the statistical program Statistical Package for the Social Science (SPSS), version 18.0 for Windows. Continuous variables were expressed as mean and standard deviation for those with normal distribution, or as median and interquartile intervals for asymmetric ones. Categorical variables were expressed as percentages and absolute numbers, analyzed by Chi-Square test. Regarding non-parametric data analysis, Mann-Whitney test was used. Spearman (r) correlation coefficient was applied to assess correlation. We adopted the level of statistical significance at 5% ($p<0.05$).

The present study respected ethical aspects according with the Resolution nº 466, from December 12 of 2012, from the National Health Council[8]. The study was approved by the Ethics in Research Committee from the institution, under the nº 130053. The researchers compromised to keep confidentiality of collected information, as well as patient's privacy, through the signature of the Commitment Term for Data Use.

RESULTS

The mean age of included patients was 64,69 years, being 63 (56,2%) males. Referring to the presence of the given educational registry, 60 (53%) records had this registry. Other patient's characteristics are exposed in Table 1.

Table 1: Characteristics of patients submitted to Hip Arthroplasty described on registries of records. Porto Alegre, RS, Brazil, 2013.

Characteristics of patients	(n=112)
Age (years)*	64,69 (±12,6)
Gender	
Male	63 (56,2)
Presence of companion (family member or caregiver)	102 (91,1)
Surgical procedure	
Total primary hip arthroplasty	70 (62,2)
Partial primary hip arthroplasty	13 (12)
Arthroplasty review	29 (25,8)
Registry of educational action	60 (53)
Confirmed comprehension by the patient	3 (2,7)
Comorbidities**	139
Systemic Hypertension	57 (40)
Diabetes Mellitus	18 (12)
Heart diseases	16 (11)
Others	52 (37)
Post-surgery complications	21 (18,7)
Infections	11 (9,8)
Heart issues	6(5,3)
Respiratory issues	3 (2,7)
Other	1 (0,9)
Hospitalization days***	7 (3-58)

Data expressed in n (%).

* Variable expressed as mean and standard deviation.

** Total comorbidities – Some patients presented more than one comorbidity.

*** Variable expressed in median and interquartile interval.

From the 60 patients who had some registry in their records about education conducted by the nurse, 32 (53,3%) presented more than one registry during admission. The association between days of admission and number of registries was significant (p=0,002); however, with a low positive correlation (r=0,216). Among those patients, two or more comorbidities were found, and obtained significant association (p=0,015) with hospitalization days. There were no registries of family members or caregivers' participation in educational actions, realization of individual educational plans and neither regarding the delivery of the guide with specific orientations for HA.

In relation to the Nursing Process, the educational registry was present in the Nursing Evolution in 56 (50%) records. Regarding the content, 119 registries of educational actions were identified. The prevalent registry types were related to post-operative care 36 (32%), mobilization 23 (20,5%) and bed exit 21 (18,8%). The frequency distribution of educational actions' content is presented on Table 2.

Table 2: Frequency distribution of educational actions' content about Hip Arthroplasty present in the registry of steps from the nursing process. Porto Alegre, RS, Brazil, 2013.

Content of educational actions (n=119)	Anamnesis	Evolution
	n (%)	n (%)
Post-surgery care	1 (0,9)	35 (31,2)
Mobilization	2 (1,8)	21 (18,7)
Bed exit	1 (0,9)	20 (17,9)
Positioning	1 (0,9)	16 (14,3)
About the surgery	2 (1,8)	13 (11,6)
Physiotherapy exercises	0	4 (3,6)
Home planning	1 (0,9)	2 (1,8)

Data expressed as n (%).

DISCUSSION

The nursing assistance registry reflects the quality of the offered assistance. To identify the frequency and content of this tool can help characterizing the nursing contribution for patient's education, besides providing premises to enhance the nurse language in different care environments.

More than half of analyzed records had nursing registries related to patient's education. A meta-analysis identified that non-pharmacological interventions and educational programs can help to reduce pain of patients with hip osteoarthritis before arthroplasty and, educational follow-up can facilitate their return to daily activities[9].

In general, we noted that although slightly more than half of nursing registries had education delivered to patients, many interventions regarding patient's education are being under-documented. A study allows inferring that nurses value biological aspects in detriment of other aspects, as psychosocial and educational, failing to register orientations and referrals done by the nursing team[10]. In this context, lack of education registries demonstrates deficiency in nursing registries related to self-care promotion.

In the present study, the presence of a companion (family member or caregiver) was registered in 102 records; however, there was no documentation about the type of participation during the nursing educational action. The lack of this type of registry can also be characterized as unawareness of nurses in how to register these actions, demonstrating a need to train the assistencial team, in a way to include the companion in this process.

Researchers[11] affirmed that creating an individual educational plan is efficient, as it is based on the needs of each patient. It contributes to the process continuity and avoid unnecessary and repetitive practices being performed. In the studied sample, 83 patients were submitted to primary HA (total or partial); however, none of analyzed registries found an individual educational plan conducted by the nurse. This deficiency in registries can be related to how nurses operationalize educational interventions; as in clinical practice, it might not follow a standardized methodology. In addition to this limitation, researchers' point that a reduced numbers of nurses, work overload, and lack of investments in continuing education are barriers to these practices[12].

In relation to the registered educational actions, the most frequent were post-operative care, mobilization, and bed exit. However, there was no registry about psychosocial needs. Despite this, anxiety reduction can be an important factor for peri-operative care outcomes[13]. Another study showed the lack of knowledge about the procedure and recovery process, which are aspects that could complicate adherence of patients in the rehabilitation process. The authors affirmed that nursing orientations during pre-operative are fundamental for patient's responsibility during self-care process[14].

Corroborating these data, clinical care related to showering, positioning and protection against infection were frequently registered; while those related to the patients' education were less mentioned in a study that validated the crossed mapping of prescribed care to orthopedic patients with the Nursing Intervention Classification (NIC)[15]. When confronting these data with our findings, it is possible to identify an advance in the implemented care models, once educational aspects were included in nursing care.

Although this advance was found, care focusing in the home planning was present in only three registries (2,7%). Actions focused on home still need to be incorporated in clinical practice, because there are reports of positive experiences when nurses perform home planning for hospital discharge, highlighting the importance of home visit in this context[16].

The association between days of hospitalization and the number of registries regarding educational action was significant, yet, with low positive correlation. It is believed that long time of permanence from patients in this study can be related, due to the presence of previous

comorbidities and, by complications caused by the surgery. This data finds support in the literature. A North-American study showed that previous comorbidities prolonged hospitalization of patients with orthopedic issues[17]. In this sense, we can infer that the longer the hospitalization, less educational actions were registered; and other aspects could be highlighted, as directing care to these situations in detriment of the implementation of specific educational actions for HA.

Patients submitted to HA need to be prepared to face this surgery, seeking better perspectives for their recovery. Thus, this preparation needs to be effectively planned and done. Many times in practice, this guidance is done in a quick way and with an intense flux of information, without sufficient time for the patient to assimilate, formulate relevant questions and clarify doubts related to the surgical procedure[18]. In this study, only three (2,7%) records had registries of comprehension confirmed by the patient regarding the provided education. The registry of this situation is important, so it can be reinforced during hospitalization. In counterpart, in a recent longitudinal study, researchers identified a significant improvement of patient's knowledge related to activities that should be avoided during HA post-surgery period, comparing the first and last day of hospitalization (p=0,035); however, nursing care prescribed for these patients was not associated with this evolution. The investigation suggests that effectiveness of nursing interventions should be assessed through patient's knowledge[19].

In the studied hospital, patients submitted to HA receive a guide with specific educational orientations referring to the post-surgery care from nursing teams[7]. Nurses and the institution are engaged in health promotion from these patients using this strategy. The teaching process with guides or educational booklets should be conducted individually, aiming to change behavior, risk factors and effectively contribute during and for health promotion[20]. Although this practice exists, it was not found registry of delivery from this guide on analyzed records. The concern is that non-registered intervention is not visible, thus, it is believed that structured registry completes the nursing documentation[21-22].

In this sense, to capacitate and stimulate nurses to register their educational actions, or even so to standardize the language of the nursing process related to education, could configure a facilitating strategy for this registry. To adequate interventions to patients' and families' culture and preferences can help to comprehend the education provided, as well as to favor the process of improving the quality of nursing registries.

CONCLUSIONS

Nursing registries regarding education of patients submitted to Hip Arthroplasty were found in more than half of analyzed records. Although the nursing registry present aspects related to the patient's education, we conclude that better results could be obtained with the operationalization of this intervention, linked to a permanent nursing education.

As limitation of the study, we cite the non-inclusion of nursing registries of technicians, which could contribute to the improvement of this documentation.

The evidence present in this investigation allows recommendation for teaching institutions to improve nursing training for health education, and that hospitals should prioritize this theme during training; aiming to involve and promote conditions for nurses to use it in this intervention; as these aspects demonstrate to be a useful tool to improve nursing assistance. Other studies needs to be developed in a way to investigate educational actions implemented by nursing teams associated to time spent in this intervention, assessing its effectiveness from patient's results. Qualitative studies that know difficulties, and point to strategies to qualify the nursing documentation are imperative to value this practice.

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Received: 08/26/2014.
Accepted: 06/10/2015.
Published: 12/31/2015.