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Hospital glosses in the nursing audit: an integrative review

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ABSTRACT

Aim: to identify scientific evidence available in the literature about hospital glosses performed by the nursing audit. **Method:** this is an integrative review of articles in Portuguese, English or Spanish, indexed in the Pubmed/Medline, Lilacs and Scielo databases, between 2005 and 2015. For the search, the descriptors "nursing audit" and "hospital costs" were used, as well as the keyword "hospital glosses" in a combined and isolated manner. **Results:** 10,996 articles were identified. Of these, ten were selected after applying the inclusion criteria and adjustments related to the research question. Discussion: the role of the nurse auditor in the analysis of procedures and care through the registers performed by the professionals, in the review of glosses and in the negotiations between the representatives of the hospital and the agreement was evidenced. The indicators responsible for the largest number of glosses were related to nursing notes. **Conclusion:** nurses are essential in the elaboration of interventions that contribute to the reduction of these indices and rationing of resources.

Descriptors: Nursing Audit; Hospital Costs; Hospital Administration.

INTRODUCTION

The nurse auditor has an important role, as it acts in the rationalization of costs and in the identification of the care provided to the patients through the records and notes made by the professionals of the multidisciplinary team, in order to guarantee a better quality of care.

The purpose of the nursing audit is to verify the information extracted from the medical records to check the quality of the care provided to the client, the cost control and the fair payment of hospital bills, as well as to demonstrate the transparency of the negotiation, based on ethical conduct. The medical record is a tool with legal support in assessing the quality of the care provided, since it concentrates information for lawsuits and health agreements. Because it is a specific document for the registration of professional care performed, the absence or failures of nursing notes can cause hospital bills to be glossed⁽¹⁾.

Hospital glosses consist of partial or total cancellation of payment by the auditor when the auditor considers that the collection is undue or illegal⁽²⁾. The glosses, when made, characterize conflicts in the relations between the agreement and the service providers, due to economic losses.

Health care institutions face constant problems related to the glosses executed by health plan operators, which require that hospital bills be filled in correctly, and that the records are clear and objective, so that it is possible to guarantee the payment of procedures and conduct performed, registered in the medical and nursing evolution. It is the responsibility of the nurse auditor to check, analyze and examine the glosses, since faults or absence of records has caused economic damages to the health services⁽³⁾.

Glossing hospital bills is a routine activity in the work of the nurse auditor, which allows showing divergences between collection performed and operational or administrative failures detected in medical records. In the scientific literature there are studies on nursing auditing and hospital costs; however, hospital glosses performed by nurses are little approached as a research theme⁽³⁻¹²⁾.

The production of knowledge on nursing administration and audit studies represent a lower frequency of research on intervention methods carried out in post-graduation courses in Brazil. Thus, further studies in the area are recommended⁽¹³⁾.

In view of this and considering the relevance of the theme to the financial health of the institutions, the objective of this study was to identify scientific evidences available in the literature that deal with hospital glosses performed by the nursing audit.

METHOD

The proposed integrative review is a method that provides synthesis of knowledge and incorporation of the applicability of results of significant studies in practice. This research method presents six distinct phases for the development of the review: elaboration of the guiding question, searching or sampling in the literature, data collection, critical analysis of included studies, discussion of results and presentation of the integrative review⁽¹⁴⁾.

The definition of the guiding question is the most important phase of the review, since it is the one that will delimit the studies to be included, the choice of means for identifying the articles and what information to collect from each selected study. The guiding question determined in this study was: "*What are the scientific*

evidences made available in the literature that effectively analyze hospital glosses performed by the nursing audit?"

The second phase of the process proposed inclusion criteria that allowed the scientific search to be properly delimited. In this study, the following criteria were established: a bibliography composed of complete articles published in the Portuguese, English and Spanish languages, in Pubmed/Medline, Lilacs and Scielo databases, from 2005 to 2015. the following descriptors are used in Portuguese: *auditoria de enfermagem, custos hospitalares*; in English: nursing audit, hospital costs - associated or not with the keyword "hospital glosses/hospital gloss". Only studies that answered the guiding question were included.

It should be noted that, for the development of this research, the searches in the databases were carried out initially using combinations between the descriptors and the keyword; however, due to the non-retrieval of articles that answered the question of the study, it was decided to make the searches with the descriptors and the keyword in an isolated way, making the search more sensitive.

The third phase used an instrument for the extraction of the data, aiming to ensure adequate recording and accuracy of the information collected. We chose an instrument validated in the literature⁽¹⁵⁾, whose data included: subjects' definition, methodology, sample size, variables measurement, method of analysis and concepts employed.

In the fourth phase, a critical analysis of the included studies was performed, according to a hierarchy of evidences that aided in choosing the best possible evidence, according to the research design, which was one of the items analyzed in this phase: level 1 - evidence resulting from the meta -analysis of multiple controlled and randomized clinical trials; level 2 - evidences obtained in individual studies with

experimental design; Level 3 - evidence from quasi-experimental studies; level 4 - evidence from non-experimental descriptive studies or with a qualitative approach; level 5 - evidence from case or experience reports; level 6 - evidence based on expert opinions.

The discussion proposed in the fifth phase occurred from the interpretation and synthesis of the results. The data evidenced in the analysis of the articles were compared with the theoretical reference, identifying knowledge gaps and priorities for future studies.

The presentation of the integrative review was fully developed to allow the reader to critically evaluate the results. For that, pertinent and detailed information was presented, based on contextualized methodologies, without omitting any related evidence⁽¹⁴⁾.

RESULTS

According to the inclusion criteria, 10,996 articles were identified. After reading the titles, 52 articles were selected because they were related to the research objective. After reading the abstracts, the articles that did not answer the research question, repeated articles and the review articles were excluded; therefore, 26 articles were selected for complete reading.

After reading the selected articles, 16 were excluded, as they did not deal with hospital glosses, resulting in a sample of ten articles, which were discussed and analyzed. Figure 1 shows the flowchart of the search with its criteria by database.

DISCUSSION

After selecting the articles, it was decided to classify them in a table, considering the main information of each one, as presented in Table 1.

According to the results, it was possible to verify that there are no published studies with high levels of evidence. The publications presented were classified as level 4 and 5, justifying the need for the elaboration of research with delineations and greater evidence for improvement and opportunity for discussion on the research area, which is a specific activity to be carried out, primarily by the private sector of health in Brazil.

The international studies found in this review brought a comparative of hospitalization costs in a global way, relating the diagnostic category to length of stay. In these studies, the adverse events occurred were emphasized; however, most of them did not present data on hospital glosses, since the model was based mostly on the cost of treatment by diagnosis, and not in a detailed and isolated way, as the operators of health insurance plans do in Brazil.

In view of this, only one study from Colombia was included because it corresponds to the objective of this research.

Hospital glosses result in significant financial losses for health services that perform care for patients, causing losses in care costs. The main items that impacted expressively on hospital glossaries were: equipment, gases and medicines. In this aspect, it is fundamental that the nursing team has knowledge about costs of materials, equipment and procedures, in order to contribute to the improvement of the records, reducing financial losses and hospital gloss rates⁽⁷⁾.

The nursing audit directs its actions to the search for deficiencies in the medical records, intervening in the waste of resources, as well as in the reduction of glosses, especially in the most critical sectors (inten-

Figure 1. Flowchart of the distribution of the number of articles selected by databases. Paraná, 2016

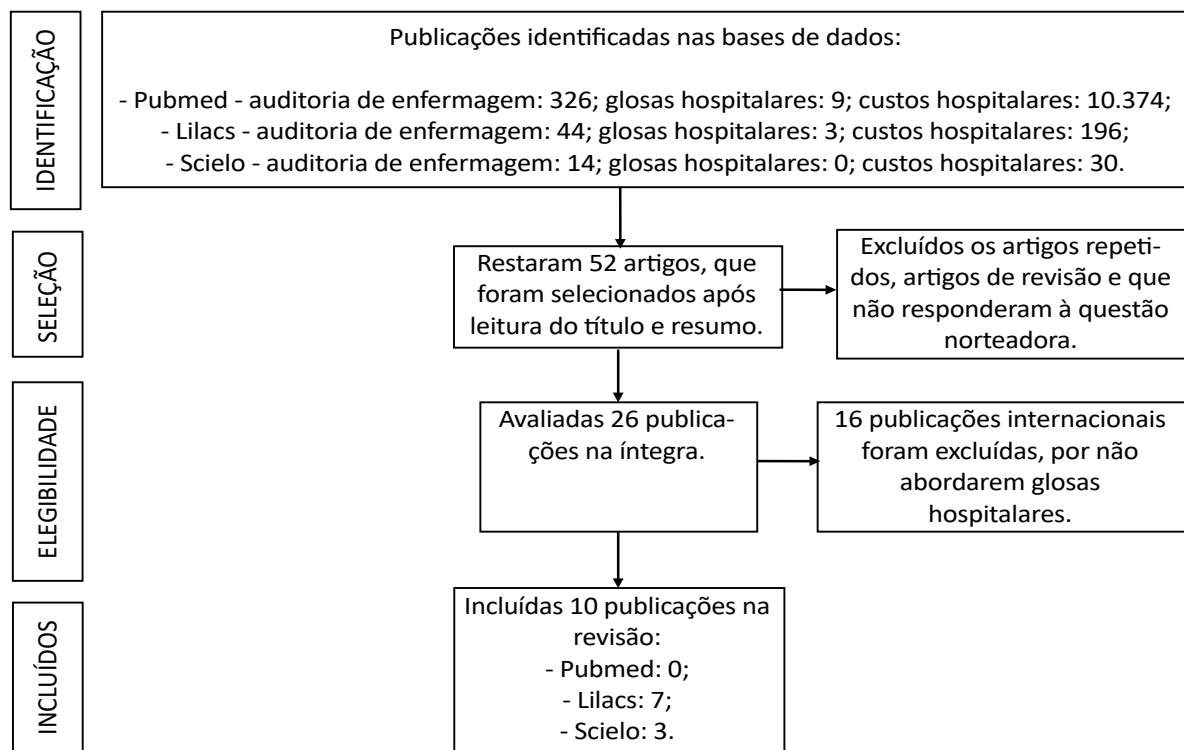


Table 1. Selected publications addressing audit-related hospital glosses. Paraná, 2016

Authors/ local/ year	Objective	Study design / level of evidence	Main results
Guerrer; Lima; Casti- lho/ Brasília- -DF, Brasil/ 2015.	Verify the components of the hospital bills - checked by nurse auditors - who received most of the adjustments at the time of the pre-analysis.	Exploratory quantitative, descriptive, single case study type. Level of Evidence - 5.	Hemodynamic materials; gases and equipment were the items that most impacted the positive adjustments. Negative adjustments resulted from undue postings in the accounts and did not generate any revenue losses. Of the total glosses, 52.24% referred to pre-analysis of nurses and 47.76% to physicians'.
Oliveira; Jacinto; Siqueira/ São Paulo - SP, Brasil/ 2013.	To report the experiences lived by the authors during the professional performance in the Surgical Center.	Experience report with descriptive approach. Level of Evidence - 5.	The knowledge about the nursing audit in the Surgical Center and the understanding of aspects and mechanisms of action of the nursing professional are imperative for a provision of quality nursing care.
Silva et al./ Brasília -DF, Brasil/ 2012.	Make a critical-reflexive analysis regarding the nursing audit with analysis of the limits and possibilities and their theoretical and practical aspects.	Critical-reflexive analysis. Level of Evidence - 5.	It is important to emphasize the importance of nursing staff registration, which is fundamental to the audit process. The professional nurse in audit is responsible for ensuring the quality of care provided to the user. There are many challenges to be faced for the development of nursing auditing, such as the discovery of a professional identity and the integration with nursing auditors from all over the country.
Scarparo et al./ Florianópolis-SC, Brasil/ 2010.	Identify current and future trends (next five years) of the nurse auditor's role in the labor market.	Delphi Technique, through two rounds, with the final participation of 34 nurses from Brazilian health and education institutions. Level of Evidence - 4.	At present, the audit is focused on the bureaucratic dimension, accounting and financial, contemplating requirements of health institutions. When this trend is transposed into the future, a projection of change, which incorporates the assessment of the quality of care, is observed. As for the methods, the present situation is to proceed in retrospect, of the internal type, contemplating the collection and analysis of payments of accounts. As the nursing audit incorporates into its practice the evaluation of quality, according to the future trend, the methods will add different ways to support the new reality.

Costa-Val; Marques/ Rio de Janeiro- RJ, Brasil/ 2010.	To demonstrate the cost and financial impact of the first surgical approach to vascular lesions in patients admitted to Hospital João XXIII / FHEMIG between 2004 and 2006.	Retrospective, cohort and descriptive, based on the audit of hospital accounts referring to 70 charts cataloged by the Cardiovascular Trauma Service. Level of Evidence - 4.	The monetary value passed on by SUS and the private sector implied a potential gap of 44%. There was a direct correlation between costs and anatomical topography of the lesions and exponential in relation to the variables hemoderivatives and vascular prostheses.
Ferreira et al./ Chia-Colômbia/ 2009.	Identify the impact caused by the non-nursing record, contrasting the possible glosses and highlighting the main types resulting from these records.	Descriptive and exploratory research in which a qualitative and quantitative approach was used. The study was materialized through documentary and was performed at the urology service of a private hospital in the municipality of Niterói / RJ. Level of Evidence - 4.	The importance of the contribution of the nursing record in the process of decreasing hospital glosses is highlighted, showing how the nursing professional is the fundamental tool in this context.
Godoi et al./ São Paulo-SP, Brasil/ 2008.	Evaluate the most frequent indicators in the hospital discussions for an analysis of the hospital charts and nursing annotations, in order to reduce these indices in a global way.	Descriptive research, retrospective analysis in unaudited hospital records in a hospital in the interior of the state of São Paulo. Level of Evidence - 4.	The results showed inconsistency and incoherence between prescription, clinical evolution, annotation and nursing check.
Ribeiro et al./ Rio de Janeiro-RJ, Brasil/ 2008.	To analyze how health insurance plan operators and hospital and medical services organize access to health services in Brazil, and what mechanisms they use to save costs and make decisions.	Based on an intentional selection of operators based on number of beneficiaries, organizational modality and geographic coverage, probabilistic samples of doctors and hospital services were selected. Data were obtained through questionnaires with representatives of operators, doctors and hospitals accredited to them. Level of Evidence - 4.	The relations between operators, doctors and hospitals were established on bases inherited from the old social security system, with prevailing payment of services by fixed tables and open accounts. Funding mechanisms such as risk sharing, and efficiency-seeking are poorly experienced. Mechanisms for reducing harm are fragile, as are incentives for the appropriate use of technologies. Moderating consumption factors or access barriers are the most common means of controlling costs.
Scarparo; Ferraz/ Brasília- DF, Brasil/ 2008.	To identify and analyze the opinions of audit specialists who work in the context of nursing and systematize trends in the design, method and purpose of the nursing audit, now and for the next five years.	Delphi Technique, type of prospective and consensual evaluation of trends, by specialists in the researched topic. Level of Evidence - 4.	The current conception of the audit is focused on the accounting and financial view, in view of the economic support of the hospital and as a controlling act, to identify undue payments related to the hospital bill; in the future, this conception will be associated to the evaluation of the quality of care, with involvement in other areas that interfere with it

Luz; Martins; Dynewicz/ Goiânia-GO, Brasil/ 2007.	Identify the quality of nursing records in hospital bills.	Quantitative, descriptive and exploratory approach, whose characteristic is to evidence phenomena using standard techniques of data collection, going beyond identification, searching in an exploratory way for an explanation for the phenomena. Level of Evidence - 4.	There are records in which the prescription check does not occur or is performed incorrectly; there is also incomplete annotation of vital signs. In general, the annotations are understandable, because although handwriting is poorly readable, standard acronyms and technical terms are used. Based on the identified problems, we suggest further intensification of continuing education on nursing records and new studies that identify the economic values lost by glosses in hospital bills.
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sive care unit, semi-intensive care unit and surgical center)⁽¹²⁾. The review of the hospital bill presented itself as an expanding activity, which can be performed by both internal and external auditors⁽¹¹⁾.

The nursing notes contained in the medical records are used in the audit process to point out inadequacies of nursing care in relation to services rendered, to ensure the billing of hospital bills and to review glosses⁽⁸⁾. The nursing audit method, covering data collection and analysis of hospital bill payments, in order to generate glosses due to nonconformities, was considered a practice that will predominate in the coming years⁽¹⁰⁾.

The indicators responsible for the largest number of glosses are related to nursing notes. The data corresponding to the identification of verification, evolution and execution of the activity were the indicators of greater index of divergence. Thus, it is possible to highlight the role of nurses in the elaboration of interventions that are effective for the reduction of these indices⁽⁶⁾.

It was verified that the biggest problem of checking occurs in the morning shift, when, according to the routine of the units, there is an exchange of prescription, which is attached to the medical record to be evaluated by the doctors. Ideally, prescriptions should be checked for procedures, checks and annotations before being attached⁽³⁾.

Hospital glossaries result in financial losses not only for health institutions, but also for professionals, especially physicians, who receive their fees for procedures performed. All the conducts performed in the patient must have their respective registration, be they medical, nursing or other professional categories, regarding the material resources used or even hospital visits. The difficulty for physicians to properly understand and record their professional acts, understanding the meaning of the codes that are tied to the procedures, can be observed. However, it is worth noting the mandatory medical prescription to consolidate the use of gases and equipment through the nursing registry, especially in private services and agreements⁽⁴⁾.

Awareness of health professionals, that is, sensitization through the continued guidance of health professionals, reflects a greater and participatory involvement to achieve the adequate completion of medical records. Health institutions, for their part, need to check the reasons for missing records, often unmet by the shortage of professionals available in the sectors. It should be in the interest of all multidisciplinary team that the medical record be adequately filled to generate accurate information, since procedures that are not proven or recorded in a deficient manner will have an impact on glosses, and the institution will be penalized in its financial results. It is up to the company to evaluate

if it is better to have few professionals and thus result in future glosses or whether hiring more professionals would be a possible solution⁽⁵⁾.

Health institutions that incorporate the importance of records into the culture of workers are therefore cost-less, since a well-written record does not entail losses⁽¹²⁾.

A study carried out previously showed that health insurance plan operators manage resources based on the glosses and the use of moderating factors. In addition, operators resist the introduction of more advanced quality and cost control technologies, leaving the burden of medical care costs to beneficiaries and, for providers, the table of procedures⁽⁹⁾. It was observed that this same model of cost management still prevails today⁽¹⁶⁾.

As for the payment systems to hospitals, the forms of financing through open accounts and the pay table by procedures predominate fundamentally. In this way, the hospitals deliver accounts subject to glosses by the operators and the payments are retrospective, according to the services produced. More coherent forms of prospective funding, which are generally less sensitive to the increased costs, are not used as the Diagnosis Related Group (DRG) or similar, and budget transfers: global when there is budget set for a certain period or by similar result and bonus payments, which may represent the rapid improvement of precarious services⁽¹⁶⁾. Regarding physicians, it can be said that payments by tables do not go through mechanisms of quality control, decision review or risk sharing, giving the impression that cost control is reduced to mere containment of payment amounts for services rendered⁽⁹⁾.

Institutional routines, when validated between institutions and operators, facilitate the development of records in medical records. Validated protocols contribute to standardization of information completion and hospital accounts

billing. Thus, it became evident that permanent education in health remains an effective tool to reduce wastes and to educate employees.

The scarce data in the literature did not allow further deepening of the discussions on the subject under study. The relevance of the subject calls attention of being a frequent practice in the routine of the nursing auditor. The results of the articles suggest a change in the models of payment of the providers, in order to minimize losses to the hospital institutions⁽⁹⁻¹¹⁾.

CONCLUSION

It is understood that the glosses made on invoiced accounts may reflect the organizational situation of the hospital institution. The auditors, on the other hand, assign their actions to audit hospital bills. It is observed that records made in medical records are instruments of work of the auditors and not only represent financial management, which produce significant information in terms of the quality of care provided and can provide intervention actions of this professional. However, the glosses represent a stage of the administrative-financial function of the auditing nurses, who audit procedures and care through the records executed by the professionals.

In cases where divergences between collection and medical records occur, the health care auditor may partially or fully gloss over accounts already billed, a task that represents one of his/her administrative-financial functions. Many glosses may reflect the organizational situation of a hospital institution.

The studies focused on this aspect contribute to the reflection of the audit function and the change of attitude of the auditors, to improve the care performed by the health professionals. Institutions, in turn, need to be attentive to the aspects that bring hospital glosses with

a view to rationalizing and allocating available resources, adding to the improvement and growth of health services along with professionals who work directly with patients.

The present study therefore adds efforts to consolidate the actions of the nurse auditor as a specialty. The importance of such professional in the field of permanent education and quality is decisive for the investment in improvements in care practices.

It should be noted that there is a shortage of studies available in the scientific literature that deal with the topic of hospital glossary analysis. The need for further studies on the subject that is essential for the evolution of the model practiced in Brazil should be emphasized.

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