PATIENT SAFETY IN THE HOSPITAL CONTEXT: AN INTEGRATIVE LITERATURE **REVIEW**

Andréia Cristina Araújo Silva¹, Jéssica Fontinele da Silva¹, Lidyane Rodrigues Oliveira Santos², Fernanda Valéria Silva Dantas Avelino³, Ana Maria Ribeiro dos Santos³, Antônio Francisco Machado Pereira⁴

ABSTRACT: This integrative review aimed to identify the main patient safety issues addressed in the hospital context. The search occurred in three electronic databases, covering the period 2009 to 2015, with the following descriptors: "Patient safety", "Risk control" and "Hospitalization". The study sample consisted of 34 articles. There was a significant increase in the number of publications on the subject in 2013, more than 100% compared to the year 2009. Of the studies, 22.22% dealt with adverse events and 18.52% with errors in the administration of medication. Among preventive measures, 37.93% highlighted continuing education and 13.79% handwashing and the correct identification of the patient. The strategic option for safety has been included in the agendas of health institutions, organizations and systems as a priority. Therefore, it is suggested to expand the focus of research to improve the quality of care.

DESCRIPTORS: Patient safety; Risk control; Hospitalization.

A SEGURANÇA DO PACIENTE EM ÂMBITO HOSPITALAR: REVISÃO INTEGRATIVA DA LITERATURA

RESUMO: Revisão integrativa com o objetivo de identificar as principais temáticas abordadas em ambiente hospitalar para a segurança do paciente. A busca ocorreu em três bases de dados eletrônicas, abrangendo o período de 2009 a 2015, com os descritores: "Segurança do Paciente", "Controle de risco" e "Hospitalização". A amostra do estudo constituiu-se de 34 artigos. Houve aumento significativo no número de publicações sobre a temática em 2013, mais de 100% comparando-se ao ano de 2009. Dos estudos, 22,22% tratavam sobre eventos adversos e 18,52% sobre erros na administração de medicamentos. Dentre as medidas preventivas, 37,93% destacam a educação continuada e 13,79% a lavagem das mãos e a identificação correta do paciente. A opção estratégica pela segurança tem sido incluída nas agendas das instituições, organizações e sistemas de saúde como prioridade. Logo, sugere-se ampliar o foco da pesquisa para a melhoria na qualidade do cuidado.

DESCRITORES: Segurança do paciente; Controle de risco; Hospitalização.

LA SEGURIDAD DEL PACIENTE EN ÁMBITO HOSPITALAR: REVISIÓN INTEGRATIVA DE LA LITERATURA

RESUMEN: Revisión integrativa cuyo objetivo fue identificar las principales temáticas abarcadas por el ambiente hospitalar para la seguridad del paciente. La búsqueda ocurrió en tres bases de datos electrónicas, en el periodo de 2009 a 2015, con los siguientes descriptores: "Seguridad del Paciente", "Control de Riesgo" y "Hospitalización". La muestra del estudio fue constituida por 34 artículos. Hubo aumento significativo en el número de publicaciones acerca de la temática en 2013, más de 100% comparándose al año de 2009. De los estudios, 22,22% tenían como tema eventos adversos y 18,52%, errores en la administración de medicamentos. Entre las medidas preventivas, 37,93% destacan la educación continuada y 13,79%, la higiene de las manos y la identificación correcta del paciente. La opción estratégica por la seguridad viene siendo incluida en las agendas de las instituciones, organizaciones e sistemas de salud como prioridad. Así, se sugiere ampliar el foco de la investigación para perfeccionar la cualidad del cuidado. **DESCRIPTORES:** Seguridad del paciente; Control de riesgo; Hospitalización.

Corresponding author:

Lidyane Rodrigues Oliveira Santos Faculdade Santo Agostinho

Av. Presidente Ianio Quadros, 1165 - 64053-390 - Teresina, Piauí, Brasil E-mail: lidyanero@yahoo.com.br

Received: 27/11/2014

Finalized: 02/06/2016

¹Registered Nurse. Federal University of Piaui. Teresina, PI, Brazil.

²Registered Nurse. MSc in Nursing. Professor of the Camillo Filho Institute. Teresina, PI, Brazil.

³Registered Nurse. PhD in Nursing. Professor of the Nursing Graduate Program of the Federal University of Piauí. Teresina,

⁴Registered Nurse. MSc in Nursing. Professor of Nursing of the Federal University of Piauí. Teresina, PI, Brazil.

INTRODUCTION

The issues associated with patient safety constitute a worldwide health problem. Accordingly, the risks and the occurrence of events that cause harm to the patient have increased in all environments, especially in the hospital context. In recent decades, there has been increasing concern regarding the policies to improve the quality of care, and the problems that involve risks to patient safety, being the subject of various studies within the health system.

Patient safety is defined as the act of avoiding, preventing or improving the adverse outcomes or injuries arising in the process of medical-hospital care and home care⁽¹⁾. The issue is a serious global public health problem. Data indicate that in developed countries, one in 10 patients is harmed while receiving hospital care. The risk of infection associated with healthcare in some developing countries is up to 20 times higher than in developed countries⁽²⁾.

Although healthcare provides enormous benefits for all involved, the occurrence of errors is possible, with the patients potentially suffering serious consequences. Florence Nightingale noted that "It may seem a strange principle to enunciate as the very first requirement in a hospital that it should do the sick no harm" (3.34). Florence was a pioneer in the prevention of adverse events. Such prevention is a principle that is becoming more relevant and current (2). This issue became the focus of attention at the end of the 1990s, through successive publications, among them the book "To err is human: building a safer health system", developed by the Committee on Quality of Health Care in America of the: Institute of Medicine of the National Academies (IOM), completed in 1999 and published in 2000(2). Since then, in 2002, the World Health Organization (WHO), with the support of member countries, launched the initiative to discuss the issue. In 2004, through the World Alliance for Patient Safety program, guidelines and strategies were created to promote and disseminate practices that ensure the safety of the patient. This program defined as a priority the development of studies based on scientific evidence with best practices, as well as research initiatives with the greatest impact, aiming to establish measures to increase patient safety and the quality of the health services, supported by political commitment from the signatory states(4).

In Brazil, for the realization of the established goals, adverse events started to be monitored in 192 hospitals of the Sentinel Network, a strategy created by the Health Surveillance Agency, which now operates as an observatory in the services for the management of health risks. Furthermore, in 2013, the National Program of Patient Safety (PNSP) was instituted, aiming to contribute to the improvement of healthcare in all health facilities in the country to implement protocols, centers of patient safety and the reporting of adverse events^(2,4). The program offers six patient safety protocols focusing on the problems of higher incidence: safe surgery, falls, pressure ulcers, safe administration of medication, hand hygiene and patient identification⁽²⁾.

Although programs have been implemented to improve the quality of care, a study that would address the main practices used in the hospital environment was necessary because of the need to highlight their effectiveness for patient safety. Therefore, being a extremely relevant and current theme to be studied from the perspective of improving the quality of care, this study aimed to identify the main themes explored, in the years 2009 to 2015, as well as preventive measures in the hospital environment for patient safety, in order to promote strategies, actions and awareness of the professionals working in care.

METHOD

This is an integrative literature review based on the bibliographic search, a method that brings together the scientific literature relevant to a particular topic, providing quick and synthesized access to scientific results of more importance for the area of study, with published articles on the practices used for patient safety⁽⁵⁻⁶⁾.

A literature review was conducted, between October and December 2015, at the Federal University of Piauí, which offers free access to several journals that are indexed in the electronic databases: LILACS (Latin American and Caribbean Center on Health Sciences Information), SciELO (Scientific Electronic

Library Online) and BDENF (Nursing Database). The following integrated descriptors were used: Segurança do Paciente/Patient Safety/Seguridad del Paciente, Controle de Risco/Risk Management/Control de Riesgo, Hospitalização/Hospitalization/Hospitalización.

The inclusion criteria were based on access to articles published in full, in national and international journals, in Portuguese, English and Spanish, according to the descriptors, which presented a full and/or partial approach to the object of study and were published between 2009 and 2015. Literature review articles, experience reports, reflective articles, editorials, case studies and duplicate articles were excluded.

A total of 558 articles were recovered from the databases, with 310 in LILACS, 180 in SciELO and 68 in BDENF. After the application of the above exclusion criteria, 76 articles were pre-selected. From the analysis of the abstracts, results and conclusions, 34 articles were selected that met the research objectives, according to a pre-established form. The data were processed, organized and stored in an Excel® spreadsheet (Office 2010®), separated by year, author and subject. For the data analysis, percentages were used for frequency distribution by year, main authors and themes addressed. The data were then discussed considering the pertinent literature and demonstrated as bar and sector graphs. The study covers the analysis of the main themes addressed in the databases on patient safety, preventive measures for patient safety and the number of articles published per year.

RESULTS

The results showed statistically that there was a significant increase in publications on the themes: patient safety and preventive measures found to improve the perspective of safety.

Figure 1 shows the number of articles found per year, and demonstrates a growing number of articles published in recent years, as can be seen in 2013, which included 10 items of the selection, when compared to 2009, which showed only four studies.

Figure 2 highlights the main themes in the selected articles on patient safety, with adverse events being the most discussed topic, followed by errors in medication administration, handwashing and education of the professional. The others, though little mentioned, were shown to be relevant to patient safety.

Figure 3 highlights that, in the prevention of adverse events for patient safety, continuing education of professionals had a prominent place in the articles selected. Subsequently, "Handwashing", "Correct identification of patients", "Notification of adverse events" and "Effective communication" also appear as preventive measures.

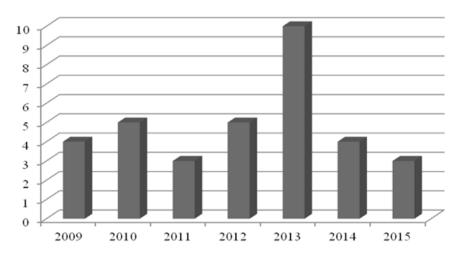


Figure 1 – Number of articles found per year n=34. Teresina - PI, Brazil 2015

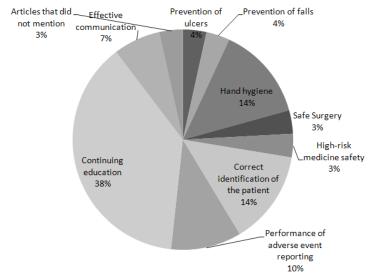


Figure 2 - Main themes addressed regarding patient safety. Teresina-PI, Brazil, 2015

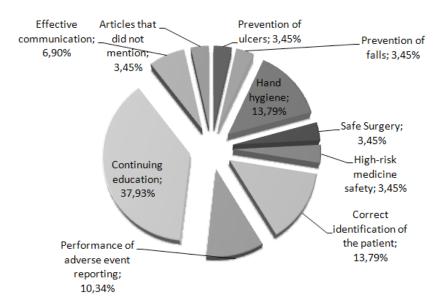


Figure 3 - Prevention of adverse events for patient safety. Teresina-PI, Brazil, 2015

DISCUSSION

The data showed a significant increase in scientific production on the subject since 2009, which is directly related to increased emphasis by national and international bodies on the policies of quality of care provided to the user in the last decade. In the global context, the movement for patient safety began in the final decade of the twentieth century, after the publication of the report by the Institute of Medicine of the USA, which presented results of several studies revealing the critical situation of healthcare in that country. Data indicated that, of 33.6 million hospitalizations, approximately 44,000 to 98,000 patients died as a result of adverse events⁽⁷⁾. Since then, the WHO has demonstrated its concern for patient safety and adopted this issue as a matter of high priority in the policy agenda of its member countries. In May 2007, the nine solutions for adverse event prevention in healthcare were published, which explains the greater number of publications in 2009, given that it was a new subject for research.

The data allowed the analysis of the main themes addressed in order to define the magnitude of the problem. Among the findings, adverse events were the most mentioned, with a percentage of 22.22%. In this context, despite the advances in the health area, patient safety is still influenced by health professionals through the occurrence of errors that directly reflect on the quality of life of the patients. These errors, called "adverse events", are characterized as undesirable, however, preventable

occurrences of a prejudicial nature, which jeopardize the safety of the patient that is under the care of health professionals⁽⁷⁻⁹⁾.

Among the adverse events most cited in the studies, dose errors were one of the most frequent problems related to medication administration (18.52%), affecting the quality of the care provided to hospitalized patients. This risk is increased when health professionals are unable to read the prescriptions correctly, resulting in confusion during dispensing, distribution, preparation and administration. Therefore, one of the factors that can help prevent these events is the correct identification of the patient, since clients with similar names in the same ward or receiving the same drug, but with different doses, can be easily confused and end up receiving an dose inappropriate for the treatment⁽¹⁰⁻¹⁴⁾.

A study on risk factors for the occurrence of errors in the preparation of intravenous medications pointed out that the most common errors are related to the preparation of medicines, with this being due to work overload and lack of attention. It also highlighted that advance preparation, inadequate reconstitution and dilution, lack of disinfection of ampoules and benches and the omission of the stage of hand hygiene were the main risk factors identified in this category⁽¹⁵⁾.

Another study related to the administration of intravenous medications in a hospital within the Sentinel Network emphasized the need for health professionals to check the identification of patients before performing any procedure. The use of wristbands and identification cards in locations visible to the team also constitutes an important error prevention measure in the administration of medications⁽¹⁵⁻¹⁶⁾. Considering the other literature studied, the importance of the establishment of criteria to standardize the data and language printed on the identification tags was confirmed⁽¹⁷⁾, with 13.79% of the sample mentioning correct identification of the patient as a preventive measure.

Another issue addressed in the articles was the question of professional education, which appeared in 14.81% of the articles, being indicated as the best way to prevent adverse events (37.93%). This is easily understood, since the management of risks is complex work and incorporates different aspects of the professional practice, making the qualification of the multidisciplinary care relevant (18-20).

The researchers highlighted the following challenges for patient safety in health institutions: the great care pressure that professionals suffer, the intense demand and the high workload, hampering the search for scientific evidence and new technologies, which become inaccessible for many professionals, preventing the detection of complications. If used, these resources can optimize the time and produce a consequent improvement in quality of care⁽²¹⁻²²⁾.

Handwashing, discussed in 14.81% of the articles, is seen to be parallel to other adverse events, as its practice mainly depends on factors such as professional education and directly operates to decrease hospital infections. As an isolated preventive factor, it was considered a relevant factor, with 13.79%. In the everyday care, it contributes to the simplification of steps, to streamline the work and to promote the development of regular opportunities for hand hygiene, a practice often neglected in the priority of care activities^(17,23). Different strategies can be employed in the drive to promote adherence to hand hygiene, such as feedback from professionals, encouraging the use of alcohol solutions and the establishment of a plan of goals, with the participation of leaders and staff⁽¹⁹⁾.

Although discreet, the reporting of adverse events and incidents was discussed in 1.85% of the sample studied. As a prevention factor, it was observed in 10.34% that, besides contributing to the construction of a database on risks and problem situations, reporting also allows the implementation of necessary changes in the care process, which promotes a safer working process and prevents future adverse events^(13,20-21).

Faced with the reporting of adverse events and technical complaints made by health professionals and considering the results in the literature regarding occurrences that affect the patient, it is believed that the study and analysis of these occurrences will enable the development of continuing education programs that encourage an increase in notifications. This would ensure the safety of patients and result in continuous improvement in the quality of the health services^(8,21).

The current literature supports the continued need for research, reporting and analysis of occurrences that assist in the planning of proactive interventions by constructing defensive barriers

for the prevention of adverse events, aiming to provide quality care that does not cause harm to the patients (22-24). Regarding this safety culture and communication of errors, the lack of reporting clearly appears in 6.90% of the studies, with this described as being due to difficulty in confessing the error. While error is inherent to people there is a fear of punishment and, therefore, underreporting occurs. Therefore, the need arises to adapt to legal norms, working intensely for the clinical safety of health organizations, use of appropriate records and knowing current errors, which requires changes in the thinking and culture itself (23-25).

The risk of falls from the bed of patients admitted to the hospital environment was also highlighted in 1.85% of the articles found. This risk, in the majority of cases, is associated with older male patients with neurological diseases, being directly related to the quantity of professionals in the health service and companions uninformed about the condition of the patient. In this regard, the studies showed the use of raised guards and guidance for the companions (9.26%) to be effective preventive measures^(13,25-26).

Of the articles selected, 1.85% did not address specific issues on preventive measures for patient safety. These articles did, however, address the need to work with the teams in relation to the error and guilt as an alternative to modify and transform the event into an opportunity to discuss and develop critical thinking about the care actions and attitudes to their own errors and those of colleagues. This aims to perceive the error as a learning opportunity to avoid new events related to the same cause⁽²⁶⁾. Thus, it is essential to know the reality of the work, to encourage the participation of people and to employ tools to manage risk, aiming to minimize the occurrence of adverse events and injuries to health service users^(15,17).

The analysis shows a fragmented view of patient safety in this environment, being seen as the responsibility of a professional category (medical or nursing). Therefore, these statements indicate some empowerment of the nursing team, while simultaneously revealing that the responsibility for safety is not equally shared by all the teams⁽²⁷⁾.

The articles deal with, or at least cite, the International Accreditation Program of the Joint Commission International (JCI), founded in 1998, which that has accredited more than 70 hospitals in 15 countries. International accreditation is one of the tools available for the evaluation and standardization of the quality of care provided by health organizers. This program works with six goals: the correct identification of patients; improved effective communication; safety of high-risk medicines; guarantee of surgeries with the correct location of intervention, correct procedure, and correct patient; reduction of the risk of healthcare associated infections; and reduction of the risk of patient injury resulting from falls, collaborating the results of the present study⁽²⁸⁻³²⁾.

From this perspective, the concern of national and international institutions with the patient safety policy was verified, a fact confirmed by the increasing number of publications on the subject of prevention of events or hazards for patient safety. This problem suggests standards to be applied in health institutions to improve the care provided to the client, which will, in many Brazilian hospitals, require a long journey that will not be quick or easy to fulfill all the goals proposed by the accreditation program. This fact makes it imperative to establish a coherent and enforceable plan of action, with options for the correction of "non-conformities", planning how many of these options will be implemented each year and the expected rates of progress in the evaluation (28-34).

CONCLUSION

In recent years, there has been the full development of global policies and strategies in countries with different levels of development, implemented by the World Health Organization. Thus, the strategic option for safety has been included in the agendas of health institutions, organizations and systems as a priority. The results presented in this study reveal the growing concern of health institutions with the well-being of patients and with improving the quality of care. However, in the studies, the evaluation of this improvement is accomplished by collecting data from medical records through a retrospective cohort design. The analysis highlights that, despite being a currently discussed theme, it is necessary to search for a way to meet the aspirations of professionals regarding appropriate methods to drive and improve the quality of care provided through the control and prevention of adverse events, aiming to achieve a better evaluation of the quality of care.

REFERENCES

- 1. Rigobello MCG, de Carvalho REFL, Cassiani SHB, Galon T, Capucho HC, de Deus NN. Clima de segurança do paciente: percepção dos profissionais de enfermagem. Acta Paul Enferm. [Internet] 2012; 25(5) [acesso em 08 fev 2014]. Disponível: http://dx.doi.org/10.1590/S0103-21002012000500013
- 2. Barros CG. Segurança do paciente como prioridade nas organizações hospitalares. [Apresentação do Hospital Albert Einstein; 2013; São Paulo].
- 3. Pedreira MLG. Enfermagem para a segurança do paciente. Acta Paul Enferm. [Internet] 2009; 22(4) [acesso em 10 fev 2014]. Disponível: http://www.scielo.br/pdf/ape/v22n4/a01v22n4.pdf
- 4. Ministério da Saúde (BR). Segundo desafio global para a segurança do paciente: orientações para cirurgia segura da OMS. Rio de Janeiro: Ministério da Saúde; 2009.
- 5. Mendes KDS, Silveira RCCP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. Texto contexto-enferm. [Internet] 2008; 17(4) [acesso em 01 jun 2014]. Disponível: http://dx.doi.org/10.1590/S0104-07072008000400018
- 6. de Souza MT, da Silva MD, de Carvalho R. Revisão integrativa: o que é e como fazer. Einstein. [Internet] 2010; 8(1) [acesso em 01 jun 2014]. Disponível: http://www.astresmetodologias.com/material/O_que_e_RIL.pdf
- 7. Silva AEBC. Segurança do paciente: desafios para a prática e a investigação em Enfermagem. Rev. Eletr. Enf. [Internet] 2010; 12(3) [acesso em 15 jan 2014]. Disponível: http://dx.doi.org/10.5216/ree.v12i3.11885
- 8. Bezerra ALQ, e Silva AEBC, Branquinho NCSS, Paranaguá TTB. Análise de queixas técnicas e eventos adversos notificados em um hospital sentinela. Rev. enferm. UERJ. [Internet] 2009; 17(4) [acesso em 20 jan 2014]. Disponível: http://www.facenf.uerj.br/v17n4/v17n4a02.pdf
- 9. Mendes W, Pavão ALB, Martins M, Moura MLO, Travassos C. Características de eventos adversos evitáveis em hospitais do Rio de Janeiro. Rev. Assoc. Med. Bras. [Internet] 2013; 59(5) [acesso em 10 jan 2014]. Disponível: http://dx.doi.org/10.1016/j.ramb.2013.03.002
- 10. Wegner W, Pedro ENR. Patient safety in care circumstances: prevention of adverse events in the hospitalization of children. Rev Latino-am Enfermagem. [Internet] 2012; 20(3) [acesso em 05 fev 2014]. Disponível: http://dx.doi.org/10.1590/S0104-11692012000300002
- 11. Gimenes FRE, Mota MLSM, Teixeira TCA, Silva AEBC, Opitz SP, Cassiani SHB. Patient safety in drug therapy and the influence of the prescription in dose errors. Rev Latino-am Enferm. [Internet] 2010; 18(6) [acesso em 01 fev 2014]. Disponível: http://dx.doi.org/10.1590/S0104-11692010000600003
- 12. Corbellini VL, Schilling MCL, Frantz SF, Godinho TG, Urbenetto JS. Eventos adversos relacionados a medicamentos: percepção de técnicos e auxiliares de enfermagem. Rev Bras Enferm. [Internet] 2011; 64(2) [acesso em 13 jan 2014] Disponível: http://www.scielo.br/scielo.php?pid=S0034-71672011000200004&script=sci arttext
- 13. Toffoletto MC, Ruiz XR. Mejorando la seguridad de los pacientes: estudio de los incidentes en los cuidados de enfermería. Rev Esc Enferm USP. [Internet] 2013; 47(5) [acesso em 05 jan 2014]. Disponível: http://dx.doi.org/10.1590/S0080-623420130000500013
- 14. Lima RPM, Melleiro MM. Percepção da equipe multidisciplinar acerca de fatores intervenientes na ocorrência de eventos adversos em um hospital universitário. Rev Min Enferm. [Internet] 2013; 17(2) [acesso em 20 fev 2014]. Disponível: http://www.reme.org.br/artigo/detalhes/652
- 15. Rodrigues MCS, Oliveira LC. Erros na administração de antibióticos em unidade de terapia intensiva de hospital de ensino. Rev Eletr Enf. [Internet] 2010; 12(3) [acesso em 12 jan 2014]. Disponível: http://www.revistas.ufg.br/index.php/fen/article/download/11935/7870
- 16. Camerine FG, Colcher AP, Moraes DS, Souza DL, Vasconcelos JR, Neves RL. Fatores de risco para ocorrência de erro no preparo de medicamentos endovenosos: uma revisão integrativa. Cogitare enferm. [Internet] 2014; 19(2) [acesso em 20 ago 2014]. Disponível: http://ojs.c3sl.ufpr.br/ojs/index.php/cogitare/article/view/37362/22932

- 17. Camerini FG, da Silva LD. Segurança do paciente: análise do preparo de medicação intravenosa em hospital da rede sentinela. Texto contexto-enferm. [Internet] 2011; 20(1) [acesso em 25 jan 2014]. Disponível: http://dx.doi.org/10.1590/S0104-07072011000100005
- 18. Quadrado ERS,Tronchin DMR. Evaluation of the identification protocol for newborns in a private hospital. Rev Latino-am Enferm. [Internet] 2012; 20(4) [acesso em 13 fev 2014]. Disponível: http://dx.doi.org/10.1590/S0104-11692012000400005
- 19. Vituri DW, Matsuda LM. Validação de conteúdo de indicadores de qualidade para avaliação do cuidado de enfermagem. Rev Esc Enferm USP. [Internet] 2009; 43(2) [acesso em 15 fev 2014]. Disponível: http://dx.doi.org/10.1590/S0080-62342009000200024
- 20. Dias MAE, Martins M, Navarro N. Adverse outcome screening in hospitalizations of the Brazilian Unified Health System. Rev. Saúde Pública. [Internet] 2012; 46(4) [acesso em 30 jan 2014]. Disponível: http://dx.doi. org/10.1590/S0034-89102012005000054
- 21. Fassini P, Hahn GV. Riscos à segurança do paciente em unidade de internação hospitalar: concepções da equipe de enfermagem. Rev Enferm UFSM. [Internet] 2012; 2(2) [acesso em 26 fev 2014]. Disponível: http://cascavel.ufsm.br/revistas/ojs-2.2.2/index.php/reufsm/article/view/4966/3753
- 22. Ques ÁAM, Montoro CH, Gonzalez MG. Strengths and threats regarding the patient's safety: nursing professionals' opinion. Rev Latino-am Enferm. [Internet] 2010; 18(3) [acesso em 15 jan 2014]. Disponível: http://dx.doi.org/10.1590/S0104-11692010000300007
- 23. Inoue KC, Matsuda LM, de Melo WA, Murassaki ACY, Hayakawa LY. Risco de queda da cama. O desafio da enfermagem para a segurança do paciente. Invest Educ Enferm. [Internet] 2011; 29(3) [acesso em 26 fev 2014]. Disponível: http://www.redalyc.org/articulo.oa?id=105222406015
- 24. de Sousa MRG, Silva AEBC, Bezerra ALQ, de Freitas JSF, Miasso AI. Eventos adversos em hemodiálise: relatos de profissionais de enfermagem. Rev Esc Enferm USP. [Internet] 2013; 47(1) [acesso em 08 jan 2014]. Disponível: http://dx.doi.org/10.1590/S0080-62342013000100010
- 25. Capucho HC, Arnas E, Cassiani SHB. Segurança do paciente: comparação entre notificações voluntárias manuscritas e informatizadas sobre incidentes em saúde. Rev. Gaúcha Enferm. [Internet] 2013; 34(1) [acesso em 02 fev 2014]. Disponível: http://dx.doi.org/10.1590/S1983-14472013000100021
- 26. Bathke J, Cunico PA, Maziero ECS, Cauduro FLF, Sarquis LMM, Cruz EDA. Infraestrutura e adesão à higienização das mãos: desafios à segurança do paciente. Rev. Gaúcha Enferm. [Internet] 2013; 34(2) [acesso em 05 fev 2015]. Disponível: http://dx.doi.org/10.1590/S1983-14472013000200010
- 27. Paese F, Sasso GTMD. Cultura da segurança do paciente na atenção primária à saúde. Texto contexto-enferm. [Internet] 2013; 22(2) [acesso em 17 jan 2014] Disponível: http://dx.doi.org/10.1590/S0104-07072013000200005
- 28. Bohomol E, Tartali JA. Eventos adversos em pacientes cirúrgicos:conhecimento dos profissionais de enfermagem. Acta Paul Enferm. [Internet] 2013; 26(4) [acesso em 13 fev 2014]. Disponível: http://dx.doi.org/10.1590/S0103-21002013000400012
- 29. de Paiva MCMS, de Paiva SAR, Berti HW. Eventos adversos: análise de um instrumento de notificação utilizado no gerenciamento de enfermagem. Rev. esc. Enferm. USP. [Internet] 2010; 44(2) [acesso em 15 de nov 2015]. Disponível: http://dx.doi.org/10.1590/S0080-62342010000200007
- 30. Silva FM, Porto TP, Rocha PK, Lessmann JC, Cabral PFA, Schneider K LK. Higienização das Mãos e a Segurança do Paciente Pediátrico. Cienc. enferm. [Internet] 2013; 19(2) [acesso em 27 out 2015]. Disponível: http://dx.doi.org/10.4067/S0717-95532013000200010
- 31. Lorenzini E, Santi JAR, Bao, ACP. Patient safety: analysis of the incidents notified in a hospital, in south of Brazil. Rev. Gaúcha Enferm. [Internet] 2014; 35(2) [acesso em 27 fev 2014]. Disponível: http://dx.doi.org/10.1590/1983-1447.2014.02.44370
- 32. Botene DZAB, Pedro ENRB. Os profissionais da saúde e a higienização das mãos: uma questão de segurança do paciente pediátrico. Rev. Gaúcha Enferm. [Internet] 2014; 35(3) [acesso em 15 out 2015]. Disponível: http://dx.doi.org/10.1590/1983-1447.2014.03.44306

- 33. Françolin L, Gabriel CS, Bernardes A, Silva AEBC, Brito MFPA, Machado JP. Gerenciamento da segurança do paciente sob a ótica dos enfermeiros. Rev. esc. enferm. USP. [Internet] 2015; 49(2) [acesso em 10 nov 2015]. Disponivel: http://dx.doi.org/10.1590/S0080-623420150000200013
- 34. Abreu HCA, Reiners AAL, Azevedo RCS, da Silva AMC, Abreu DROM, de Oliveira AD. Incidência e fatores preditores de quedas de idosos hospitalizados. Rev Saúde Pública. [Internet] 2015; 49(37) [acesso em 10 nov 2015]. Disponível: http://dx.doi.org/10.1590/S0034-8910.2015049005549