

KNOWLEDGE OF USERS OF A SURGERY CLINIC ABOUT THE OCCURRENCE OF INCIDENTS

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ABSTRACT: The aim of this study was to identify the occurrence of incidents that are noticed by patients during their hospital stay, to assess users views of the occurrence of incidents, and to classify noticed incidents as to type, causes, and consequences. This is a descriptive, cross-sectional study conducted through interviews with 80 patients admitted to the surgery clinic of a teaching hospital in 2014, guided by a validated instrument. Exposure to an incident was noticed by 17.5% of patients. Fourteen types of incidents were noticed, with nine being adverse events, four near-misses, and one an incident with no damage. The most noticeable incidents to the patient were those resulting from the medication administration process. Although within the context of care, many professionals have not yet recognized the importance of involving users to prevent incidents. In addition, educational activities focusing on patient safety for the empowerment of users are required.

DESCRIPTORS: Patient Safety; Iatrogenic Disease; Nursing.

CONHECIMENTOS DE USUÁRIOS DE UMA CLÍNICA CIRÚRGICA SOBRE A OCORRÊNCIA DE INCIDENTES

RESUMO: A investigação objetivou identificar a ocorrência de incidentes percebidos pelos pacientes durante o período de internação hospitalar, analisar a opinião dos usuários sobre a ocorrência de incidentes e classificar os incidentes percebidos quanto ao tipo, causas e consequências. Estudo descritivo, transversal realizado por meio de entrevistas com 80 pacientes internados na clínica cirúrgica de um hospital de ensino, no ano de 2014, norteada por um instrumento validado. A exposição ao incidente foi percebida por 17,5% dos pacientes. Foram constatados 14 tipos de incidentes, sendo nove eventos adversos, quatro quase-erros e um incidente sem dano. Os mais perceptíveis ao paciente foram os decorrentes do processo de administração de medicamentos. Foi constatado que, apesar de inseridos no contexto da assistência, muitos profissionais ainda não reconhecem a importância do envolvimento dos usuários para a prevenção de incidentes, necessitando de ações educativas, com foco na segurança do paciente, para o empoderamento dos usuários.

DESCRIPTORIOS: Segurança do Paciente; Doença Iatrogênica; Enfermagem.

CONOCIMIENTOS DE PACIENTES DE UN SERVICIO DE CIRUGÍA SOBRE OCURRENCIA DE INCIDENTES

RESUMEN: Se objetivó identificar la ocurrencia de incidentes percibidos por los pacientes durante su internación hospitalaria, analizar la opinión de los usuarios sobre ocurrencia de incidentes y clasificar los incidentes ocurridos según tipo, causas y consecuencias. Estudio descriptivo, transversal, realizado mediante entrevistas con 80 pacientes internados en servicio de cirugía de hospital de enseñanza en 2014, orientado por instrumento validado. La exposición al incidente fue percibida por 17,5% de los pacientes. Fueron constatados 14 tipos de incidentes: nueve eventos adversos, cuatro cuasi-errores y un incidente sin consecuencias. Los más perceptibles para los pacientes fueron los derivados del proceso de administración de medicamentos. Fue constatado que, aún formando parte del ámbito de la atención, muchos profesionales aún no reconocen la importancia del compromiso de los usuarios en la prevención de incidentes, siendo necesarias acciones educativas enfocadas en la seguridad del paciente en pro del empoderamiento de los usuarios.

DESCRIPTORIOS: Seguridad del Paciente; Enfermedad Iatrogénica; Enfermería.

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● INTRODUCTION

It is estimated that out of 10 people seeking assistance, at least one will experience damage from incidents, which are defined as events or circumstances arising from health care that are not associated with the underlying disease, and which might result or have resulted in damage to the patient. Incidents are classified into: notifiable conditions when there is significant potential for damage, but the incident did not occur; near-misses, when the incident did not reach the patient; incidents with no damage, when the event has reached the patient, but caused no damage; and incidents with damage, or an adverse event, when the incident results in damage to the patient⁽¹⁾.

A retrospective study that was performed in the surgery clinic of a university hospital showed 82% prevalence of incidents with no damage, and 18.7% of adverse events, with the most frequent being those related to the clinical process, such as lack of care, inadequate checks, and failures during technical procedures⁽²⁾.

Based on this perspective, prevention strategies were created, such as the Program Patients for Patient Safety, proposed by the World Health Organization (WHO), which places patients at the center of care, and makes them full partners in their care⁽¹⁾. The Speak Up Initiative, prepared by the Joint Commission International, also encourages patients' participation during care, and is intended to guide patients to solve doubts about their health status, treatment, medications used, and consent documents on assistance, as well as to choose a relative or friend to share information about their health, and to participate in decisions involving their care⁽³⁾.

Thus, users are expected to be increasingly aware and participatory in order to achieve quality in the provision of safe care in healthcare services.

In order to contribute to the improvement of health care, and to encourage the use of strategies to reduce the occurrence of incidents by involving patients in their own care, this study aims to analyze users' knowledge about the incidents occurring during their hospital stay, and to rate the reported incidents as to type, causes, and consequences.

● METHOD

This is a cross-sectional, descriptive study, developed in the surgery clinic of a university hospital. The study included all patients admitted from February to April 2014 who met the inclusion criteria of being 18 years old or older, in the pre- and/or postoperative period, mentally oriented, with length of stay greater than or equal to 24 hours at the time of data collection.

Data collection was performed through individual interviews, during day shifts, according to patient availability. A structured and validated instrument consisting of two parts was used⁽⁴⁾. The first one contained questions related to socio-demographic characteristics of the patients and clinical aspects of the hospital stay, and the second contained investigative questions about patients' opinion of incidents that occurred during hospitalization, and their involvement in promoting safety during care provided by healthcare professionals.

Data were structured in the software Statistical Package for the Social Sciences 20.0, and analyzed descriptively, with mean and standard deviation for continuous variables, and absolute and relative frequencies for categorical variables.

Reports of the incident were transcribed, analyzed, and then judged according to type: notifiable condition; near-miss; incident with no damage; and incident with damage or adverse event, as proposed by WHO's International Classification for Patient Safety⁽¹⁾. The consequences of the incidents were those arising from the care provided that were reported by the patients.

The study is related to the project: "Analysis of occurrences of adverse events in a hospital of the Sentinel Network in the Center-West Region," approved by the Research Ethics Committee with protocol no. 064/2008. All patients were informed about the study objectives and signed a free and informed consent.

● RESULTS

Eighty patients participated in the study, and their characteristics are presented in Table 1.

The predominant comorbidities were hypertension and diabetes mellitus for, respectively, 45 (56.5%) and 17 (20.8%) patients.

It was reported that 65 (81.3%) patients had previously been hospitalized, with 41 (51.3%) in this hospital, and 64 (80%) being referred by the regulation system of the Unified Health System; 65 (81.3%) were elective admissions, with the specialties of general and vascular surgeries being highlighted, with 20 (36.3%) and 12 (15%) admissions, respectively.

The use of at least one tubular device was reported for 41 (52.5%) patients, with five (6.3%) using an urinary catheter, eight (10%) a drain, 51 (63.8%) a peripheral venous access, three (3.8%) a central venous catheter, and four (5%) a nasoenteric or nasogastric tube.

Of the patients, 72 (95%) received some kind of information in the initial phase of treatment at the clinic. As informants, physicians were mentioned by 70 (87.5%) and nurses by only two (6%) patients.

Considering other phases of treatment, 59 (73.8%) reported having received at least one type of information about the surgical preparation, four (5%) received information on prescription drugs, 28 (35%) on the treatment to be performed, 41 (51.3%) on performed or anticipated procedures and 20 (25%) on exams.

As for the patients' knowledge about incidents that occurred during the hospitalization period, only 14 (17.5%) respondents reported having seen an incident within the period of hospitalization. Of these patients, 11 (78.5%) reported incidents related to the process of medication, especially for administration of drugs to allergic patients, medication and dose errors, dose omission, and patient misidentification.

Of the total incidents, seven (50%) occurred during the morning shift. The professional involved in most (12, 85.7%) incidents was the nursing technician. Regarding the consequences from incidents, seven (50%) did not cause harm to the patient; however, five (35.7%) caused damage and required intervention.

For four (28.6%) of the patients who experienced incidents, likely causes were distraction, fatigue, and stress.

Chart 1 shows the stories of nine patients about incidents that occurred during hospitalization in the unit and were related to medication.

Among the drug-related incidents, four adverse events, four near-misses, and an incident

Table 1 – Sociodemographic characteristics of patients admitted to the surgery clinic of a university hospital. Goiânia, GO, Brazil, 2014

Characteristics	N	%
Gender		
Female	49	61.3
Male	31	38.8
Age range		
19 to 29 years	11	13.8
30 to 39 years	12	15
40 to 49 years	20	20.5
50 to 59 years	16	20
60 to 69 years	13	16.3
70 years or more	8	10
Marital Status		
Single	16	20
Married	44	55
Widowed	11	13.8
Other	9	11.3
Education		
Complete elementary school	3	3.8
Incomplete elementary school	52	65
Complete high school	17	21.2
Incomplete high school	5	6.2
Complete undergraduate course	3	3.8
Origin		
Goiânia	40	50
Countryside of State of Goiás	31	38.8
Other state	9	11.3
Income		
Up to 1 minimum salary	17	21.5
Above 1 minimum salary up to 3 minimum salaries	31	38.4
Above 3 minimum salaries	2	2.6
Could not inform income	30	37.5
Has comorbidities		
Yes	37	46.3
No	43	53.8
TOTAL	80	100

Chart 1 - Incidents related to medication, noted by the patients during hospitalization in the surgery clinic of a university hospital. Goiânia, GO, Brazil, 2014

Incident (Classification)	Circumstances under which they occurred	Behavior/Causes
Allergic reaction to drug (Adverse event)	Administration of anesthetic drug for surgical procedure, resulting in oral/labial mucosa swelling and hospitalization extension	Behavior: Suspension of surgery. Patient was informed about the event. Cause: Professionals did not investigate previous allergies.
Allergic reaction to drug (Adverse event)	Administration of drug to which the patient was allergic. Only after feeling nausea, shivering, tachycardia, and hypertensive peak did the patient inform to the nursing technician that he/she was allergic to the drug given.	Behavior: No behavior observed. Cause: Presence of professionals from other units (staff turnover), which hindered better investigation.
Medication mix-up (Near miss)	Mix-up of patients' saline by the nursing technician. A patient's relative saw that the vial label to be infused was not for that patient, and informed the professional, stopping the infusion.	Behavior: Saline mix-up was corrected. No other behavior was observed. Cause: Healthcare provider distraction.
Medication mix-up (Near miss)	Mix-up of patients' saline by the nursing technician. A patient's relative saw that the bottle label to be infused was not for that patient, and informed the professional, stopping the infusion.	Behavior: Saline mix-up was corrected. No other behavior was observed. Cause: Healthcare provider distraction.
Medication mix-up (Near miss)	Failure in giving the drug dipyrone, by the nursing technician. Patient's relative avoided possible incident through noticing the label.	Behavior: Medication mix-up was corrected. No other behavior was observed. Cause: Lack of communication.
Omission of care (Adverse event)	Following the administration of five drops of Berotec, patient presented with malaise and complaint of cardiorespiratory discomfort. Patient questioned the dose, but was informed that it was according to medical prescription. There was a lack of monitoring for drug reaction, even after the patient complained. Patient did not question the nursing professional because of fear of provider reaction.	Behavior: No behavior observed. Cause: Lack of knowledge of the professional about the maximum dose of the drug.
Wrong dose (Near-miss)	Administration of double dose of drug by the nursing technician, which was suspended by the patient when he/she, by chance, read the drug identification label. No measurable consequences.	Behavior: Checking prescription and finding mistake. Cause: Work overload.
Wrong dose (Adverse event)	Administration of a dose of insulin by the nursing technician with no consideration of blood glucose test result of 87mg/dl. Patient experienced tongue numbness, and blurred vision.	Behavior: Patient monitoring. Cause: Healthcare provider distraction.
Wrong dose (Incident with no damage)	A double dose of drug was given to the patient. No reactions or damage to the patient was observed.	Behavior: No behavior observed by the patient. Cause: No checking of dosage administered against the prescription chart.

with no damage were detected. The main consequences of adverse events were oral/labial mucosa swelling; extension of hospitalization; cardiorespiratory discomfort; nausea, shivering, tachycardia, and hypertension peak; tongue numbness; and blurred vision. The incidents detected by the patients were assigned to healthcare provider distraction, lack of communication, work overload, and the high staff turnover in healthcare facilities.

Chart 2 shows the reports of five patients about medical process-related incidents during hospitalization in that unit.

Chart 2 – Medical process-related incidents, observed by the patients during hospitalization in the surgery clinic of a university hospital. Goiânia, GO, Brazil, 2014

Incident (Classification)	Circumstances under which it occurred	Behavior/Causes
Failure during invasive procedures (Adverse event)	Patient reported a venous puncture by the nursing technician that was unsuccessful and had complications. The patient experienced pain, tingling, and numbness in the right forearm.	Behavior: No behavior. Cause: Lack of provider ability.
Omission of care (Adverse event)	Patient in immediate postoperative period, prohibited from walking for 30 days, asked the nursing technician for help to go to the toilet, but was not attended. When she got up alone, she fell on the garbage cans in the room. She complained of pain in the lower limbs.	Behavior: No behavior. Cause: Work overload.
Omission of care (Adverse event)	Complaints of headache and high blood pressure identified by nursing technician who requested medical evaluation but was not answered. Patient continued with headache and showed discomfort and anxiety.	Behavior: Patient monitoring. The reason for physician absence was not informed. Cause: Patient could not find the reasons.
Wrong dose (Adverse event)	Patient in late postoperative period experienced hemorrhage after starting the use of anticoagulants, with a dose higher than required, following by scleral and gums bleeding, epistaxis, and melena.	Behavior: Patient referred to ICU. Cause: Prescription error.
Fall. (Adverse event)	The patient reported that he got up to go to the bathroom and fell, hitting his head on the ground and starting severe headache.	Behavior: None. Cause: Lack of help from nursing staff.

The incidents related to the clinical process were 100% of cases classified as adverse events, and the main consequences were pain, tingling and numbness, sclera and gums bleeding, epistaxis, and melena. In each instance, the patient was the one who detected all of the faults, mentioning lack of professional ability, work overload, and failure during drug prescription as the causes.

Regarding the accident with the patient, only a fall was reported that resulted in severe headache, with no professional approach to assess the patient's condition after the incident.

Of the 14 incidents that occurred, in 12 (87%) the patient and the family were the main agents for identifying the failures and preventing the incidents, especially the near-misses, corresponding to four (28.5%) cases. The clinical behavior adopted by the professionals to correct the errors were in line with the type of incident. However, from the universe of incidents, only in six (42.9%) cases did the patients notice the approaches adopted.

● DISCUSSION

The incidents are caused by organizational factors, and may be related to the healthcare team members or consist of a patient's individual factors and, mostly, are considered preventable⁽¹⁾.

In this study, the users' profile is similar to the results of a retrospective study performed in a surgery clinic where female and young adult patients prevailed, which may be a feature of surgical admissions to the hospital⁽²⁾.

Incomplete elementary education and low monthly income, reported by most patients, may be related to the individual's level of understanding. The guidance received by the health team, with people with higher monthly income having higher levels of education and information are therefore better able to understand the need for good health habits^(5,6). In this study, despite the level of education, the patients showed an understanding of the information received about the treatment, as well as a clear

understanding of the occurrence of incidents in healthcare provision by the health team.

Thus, during the European Conference on Patients, healthcare providers were recommended to listen to users and educate them to think critically and act with autonomy, helping patients to understand the significance of their role in the safety measures of their own care⁽⁷⁾. To promote their health, empowered patients interact more effectively with healthcare professionals, trying to perform actions that produce better results⁽⁵⁾.

Effective communication enables a positive relationship between the healthcare team and the patient, and is crucial for the provision of good service, contributing to the patient's better and faster recovery⁽⁸⁾.

One of the strategies for preventing incidents during hospitalization is effective communication between patient/professional, as well as patients' involvement in care, with them being considered as full partners in assistance. The lack of harmony in communication is a risk factor for the occurrence of damage to the patient^(2,9).

Therefore, it is necessary that healthcare professionals recognize the importance of patient and family empowerment, and also develop educational activities so that they can understand the relevance, legitimacy, and effectiveness that their own interventions can provide to their care⁽¹⁰⁾.

In the context of perioperative care, it is estimated that 234 million surgeries are performed annually and, as a result of these procedures, two million people die, and seven million people have incidents, with 50% of them being preventable. Among the highly complex surgeries, about 3% to 16% report incidents with serious damage⁽¹⁾.

The most prevalent type of incident was related to drug administration. A study conducted in a surgery clinic showed a prevalence of 48% of drug delivery-related incidents. In the same study, dose omission was the most frequent. Risk factors for the occurrence of drug incidents were prolonged hospital stay, performance of surgical interventions, and the use of multiple medications⁽¹¹⁾.

In health practice, one of the nurse's skills is to inform the patient about the drug to be administered, its dose and route. This helps in reducing errors to oriented, conscious patients in good health condition.

Nevertheless, there is evidence that patients are more involved in their drug therapy, recognize the product by color, shape, and consistency, thus helping to prevent errors; this triggers a reflection on their responsibility in their drug therapy⁽¹²⁾.

The morning period is presented as the most favorable for the occurrence of incidents; this is so because of the method of work organization, because the activities of the clinic are concentrated in that period. This is a reality that was found in another study in which the greatest number of procedures occur in the morning, with the most common being the administration of drugs⁽¹³⁾.

The nursing technician was mentioned as the main professional involved in the incidents. Nursing is considered the front line for administration of drugs, which is one of the main actions of the nursing staff, who should know all aspects and stages involved in the medication administration process in order to prevent damage to the patient⁽¹²⁾.

The administration of drugs is a complex activity; however, because of inadequate staff sizing, in most healthcare facilities this activity is assumed by the nursing technician with low supervision of a nurse.

Of the incidents identified, most were classified as adverse events, that is, events that reached the patient and caused damage. Through these patients' reports, it was possible to identify failure in the provider/patient communication, lack of attention and consideration from the provider to what the patient is saying, and even provider work overload.

Nurses work overload influences the quality of care provided to patients, and patients realize that the low quality of service offered by these professionals is related to the large number of activities that they need to perform⁽¹⁴⁾.

Four incidents were classified as near-misses, when the incident does not reach the patient. The patient was the one who detected and warned the professional as to the probable incident, with most of them being related to medication mix-up. Patients and caregivers play a central role in the safe use of medicines. The involvement and participation in the care imply providing information, resolving doubts, and using the medication as prescribed⁽¹⁵⁾.

In this regard, the importance of patients' involvement in their care is emphasized, so as to encourage them to direct their own care in order to minimize the occurrence of incidents, becoming the main strategy to prevent these incidents⁽⁷⁾.

The Patients for Patient Safety Program, with the aim of encouraging patients to be placed in the center of care and included as care partners, has stimulated institutions to adhere to this practice for healthcare safety⁽²⁾.

A study performed through a focus group with patients and nursing staff at a tertiary hospital in eastern Canada showed that both the patients and the healthcare professionals acknowledge the importance of building a personal connection to ensure the involvement of patients in their care and safety. However, they reported that stress and nursing staff workload reduce the capacity for this connection, preventing the process of patient involvement⁽¹⁶⁾.

Researchers point out that encouragement by professionals increases patients' interest in involvement in their care and safety, and the patient says that the commitment to safety is a learning process, which includes being proactive, questioning, and reporting any observed deviation from the routine^(17,18).

Patients should participate in the reporting of adverse events, because they are able to recognize details that the team members may not notice. However, notification alone is insufficient. The use of information systems is encouraged, to improve incident monitoring, the analysis of trends, and the identification of causes⁽¹⁹⁾.

There is also a need for improvement in the management of work processes and in the organizational system, to build knowledge and attitudes for the prevention of adverse events and the promotion of the culture of safety⁽²⁰⁾.

The results of this study reinforce the need to educate patients to prevent incidents, with educational actions being the responsibility of the health institution⁽²¹⁾.

The literature on the patient's participation is still scarce. However, nuances of patients' and professionals' awareness of this new challenge can be seen, a challenge that is associated with the development of an institutional and social culture regarding healthcare services safety and quality.

● CONCLUSION

The reality highlighted in this study points to the importance of the theme of "patient to patient safety," a subject that is still little explored by the scientific community.

Whereas patients are aware of everything that involves the care that is provided to them, and are interested and inserted in the context of their assistance, many professionals still do not recognize the importance of this partnership for the prevention of incidents and, consequently, for health quality improvement.

Therefore, users' participation in care safety during hospitalization is impaired, making the development of educational activities necessary, in order to train health professionals with a focus on patient safety, emphasizing the use of communication and empowerment of health services users as strategies for incident prevention.

The fact that the study was developed in a surgery clinic is considered a limitation, thus restricting the field to a hospital and to a specific population, limiting the results found to similar groups; therefore, investment in other studies is necessary to confirm the results found. However, this study presents insights from an analysis of a given reality and the subjectivity of each patient, because patients had

various levels of care complexity, as well as varied educational levels, which may have influenced their responses. Investigating the knowledge of patients about safety during the care process can serve as a strategy to influence the improvement of care quality level.

● REFERENCES

1. World Health Organization (WHO). Patients for Patient Safety: forward program [Internet]. Genève; 2004 [citado em 05 jan 2016]. Disponível: http://www.who.int/patientsafety/patients_for_patient/en/
2. Paranaguá TTB, Bezerra ALQ, Silva AEBC, Filho FMA. Prevalência de incidentes sem dano e eventos adversos em uma clínica cirúrgica. *Acta paul. enferm.* 2013; 26(3): 256-62.
3. Joint commission on the accreditation of healthcare organizations. “Speak Up” [Internet]. Illinóis. 2005 [acesso em 15 jan 2016]. Disponível: http://www.jointcommission.org/assets/1/18/speakup_amb.pdf
4. de Freitas JS, Silva AEBC, Minamisava R, Bezerra ALQ, de Sousa MRG. Qualidade dos cuidados de enfermagem e satisfação do paciente atendido em um hospital de ensino. *Rev. Lat-Am. Enferm.* 2014, 22(3): 454-60.
5. Taddeo PS, Gomes KWL, Caprara A, Gomes AMA, de Oliveira GC, Moreira TMM. Acesso, prática educativa e empoderamento de pacientes com doenças crônicas. *Ciênsaúde coletiva.* 2012; 17(11): 2923-30.
6. dos Santos AMA, Jacinto PA, Tejada CAO. Causalidade entre renda e saúde: uma análise através da abordagem de dados em painel com os Estados do Brasil. *Est. Econ.* 2012; 42(2): 229-61.
7. Silva GS. Empoderar o paciente. O que é isso? *Saúde Business.* [Internet] 2014 [acesso em 17 fev. 2016]. Disponível: <http://saudebusiness.com/noticias/empoderar-o-paciente-o-que-e-isso/>
8. Gaspar MRF, Massi GA, Gonçalves CGO, Willig MH. A equipe de enfermagem e a comunicação com o paciente traqueostomizado. *Rev. CEFAC.* [Internet] 2015; 17(3) [acesso em 18 fev 2016]. Disponível: <http://dx.doi.org/10.1590/1982-0216201514214>
9. Dornfeld D, Pedro ENR. A comunicação como fator de segurança e proteção ao parto. *Rev. Eletr. Enf.* [Internet] 2011; 13(2) [acesso em 18 fev 2016]. Disponível: <http://dx.doi.org/10.5216/ree.v13i2.10925>
10. Longtin Y, Sax H, Leape LL, Sheridan SE, Donaldson L, Pittet D. Patient participation: Current knowledge and applicability to patient safety. *Mayo Clin Proc.* 2010; 85(1): 53-62.
11. Paranaguá TTB, Bezerra ALQ, Santos ALM, Silva AEBC. Prevalência e fatores associados aos incidentes relacionados à medicação em pacientes cirúrgicos. *Rev Esc Enferm USP.* 2014; 48(1): 41-8.
12. Franco JN, Ribeiro G, D’Innocenzo M, Barrros BPA. Percepção da equipe de enfermagem sobre fatores causais de erros na administração de medicamentos. *Rev Bras Enferm.* 2010; 63(6): 927-32.
13. Prates DO. Análise das interrupções ocorridas durante a assistência de enfermagem em unidades de tratamento intensivo [dissertação]. Goiânia: Universidade Federal de Goiás – UFG; 2015.
14. Wisniewski D, Gróss G, Bittencourt R. A influência da sobrecarga de trabalho do enfermeiro na qualidade da assistência pré-natal. *Rev Bras Promoç Saúde.* 2014; 27(2): 177-82.
15. Rede Brasileira de Enfermagem e Segurança do Paciente. Estratégias para a segurança do paciente: manual para profissionais da saúde / Rede Brasileira de Enfermagem e Segurança do Paciente. – Porto Alegre: EDIPUCRS, 2013.
16. Bishop AC, Macdonald M. Patient Involvement in patient safety: a qualitative study of nursing staff and patient perceptions. *J Patient Saf.* [Internet] 2014; 10(3) [acesso em 18 fev 2016]. Disponível: <http://dx.doi.org/10.1097/pts.0000000000000123>
17. Davis RE, Sevdalis N, Vincent CA. Patient involvement in patient safety: how willing are patients to participate? *BMJ Qual Saf.* 2011; 20: 108-14.
18. Schwappach DLB. Review: engaging patients as vigilant partners in safety – a systematic review. *Med Care Res*

Rev. 2010; 67(2): 119-48.

19. King A, Daniels J, Lim J, Cochrane DD, Taylor A, Ansermino JM. Time to listen: review of methods to solicit patient reports of adverse events. *Qual Saf Health Care*. 2010; 19(2): 148-57.

20. Moreira IA, Bezerra ALQ, Paranaguá TTB, Silva AEBC, Filho FMA. Conhecimento dos profissionais de saúde sobre eventos adversos em unidade de terapia intensiva. *Rev enferm UERJ*. 2015; 23(4): 461-7

21. Schwappach DLB. Patients and healthcare workers perceptions of a patient safety advisory. *Int J Qual Health Care*. 2011; 23(6): 1713-20.