Characteristics of patient safety incidents...



ORIGINAL ARTICLE

CHARACTERISTICS OF PATIENT SAFETY INCIDENTS NOTIFIED IN A PEDIATRIC INTENSIVE CARE UNIT

CARACTERÍSTICAS DOS INCIDENTES DE SEGURANÇA DO PACIENTE NOTIFICADOS EM UMA UNIDADE DE TERAPIA INTENSIVA PEDIÁTRICA

CARACTERÍSTICAS DE LOS INCIDENTES DE SEGURIDAD DEL PACIENTE NOTIFICADOS EN UNA UNIDAD DE TERAPIA INTENSIVA PEDIÁTRICA

Tainá Fabiola dos Santos Bica¹, Wiliam Wegner², Luiza Maria Gerhardt³, Caroline Maier Predebon⁴, Eva Neri Rubim Pedro⁵, Marcia Koja Breigeiron⁶

ABSTRACT

Objective: to describe the profile of patient safety incidents reported in the Pediatric Intensive Care Unit (PICU). **Method:** a cross-sectional quantitative study with secondary data, from the year 2014, provided by the Risk Management of a university public hospital in Southern Brazil. The data were classified according to the System of Notifications in Sanitary Surveillance and analyzed by descriptive statistics. **Results:** there were 115 reports, with an incidence of 0.72 per hospitalized patient. Most reported incidents are related to failures during health care (87%). Professional contributing factors (83.5%) were the main factors. The reported incidents occurred in the morning (49.5%) and presented damage to the patient (40.8%). **Conclusion:** risk factors, to which patients admitted to a PICU are exposed on a daily basis, can lead to the occurrence of patient safety incidents, with or without the presence of adverse events. **Descriptors:** Patient Safety; Pediatric Intensive Care Units; Child; Risk Management.

RESUMO

Objetivo: traçar o perfil dos incidentes de segurança do paciente notificados em Unidade de Terapia Intensiva Pediátrica (UTIP). *Método*: estudo quantitativo, transversal, com dados secundários, do ano de 2014, fornecidos pela Gerência de Risco de um hospital público universitário do Sul do Brasil. Os dados foram classificados conforme o Sistema de Notificações em Vigilância Sanitária e analisados por estatística descritiva. **Resultados:** houve 115 notificações, com incidência de 0,72 por paciente internado. A maioria dos incidentes notificados está relacionada a falhas durante a assistência à saúde (87%). Fatores contribuintes de ordem profissional (83,5%) foram os principais encontrados. Os incidentes notificados ocorreram pela manhã (49,5%) e apresentaram dano ao paciente (40,8%). **Conclusão:** fatores de risco, a que pacientes internados em uma UTIP são expostos diariamente, podem levar à ocorrência de incidentes de segurança do paciente, com ou sem a presença de eventos adversos. **Descritores:** Segurança do Paciente; Unidades de Terapia Intensiva Pediátrica; Criança; Gestão de Riscos.

RESUMEN

Objetivo: trazar el perfil de los incidentes de seguridad del paciente notificados en Unidad de Terapia Intensiva Pediátrica (UTIP). **Método:** estudio cuantitativo, transversal, con datos secundarios del año 2014, proporcionados por la Gerencia de Riesgo de un hospital público universitario del sur de Brasil. Los datos fueron clasificados conforme al Sistema de Notificaciones en Vigilancia Sanitaria y analizados por estadística descriptiva. **Resultados:** hubo 115 notificaciones, con incidencia de 0,72 por paciente internado. La mayoría de los incidentes notificados están relacionados con fallas durante la asistencia a la salud (87%). Los factores contribuyentes de orden profesional (83,5%) fueron los principales encontrados. Los incidentes notificados ocurrieron por la mañana (49,5%) y presentaron daño al paciente (40,8%). **Conclusión:** factores de riesgo a que los pacientes internados en una UTIP son expuestos diariamente pueden llevar a la ocurrencia de incidentes de seguridad del paciente con o sin la presencia de eventos adversos. **Descriptores:** Seguridad del Paciente; Unidades de Cuidado Intensivo Pediátrico; Niño; Gestión de Riesgos.

¹Nurse (egress), School of Nursing, Federal University of Rio Grande do Sul. Porto Alegre (RS), Brazil. E-mail: <u>tainadsbica@outlook.com</u>; ²Nurse, Professor, PhD in Nursing, School of Nursing, Federal University of Rio Grande do Sul. Porto Alegre (RS), Brazil. E-mail: <u>wiliam.wegner@ufrgs.br</u>; ³Nurse, PhD, Professor of Education, School of Nursing, Federal University of Rio Grande do Sul. Porto Alegre (RS), Brazil. E-mail: <u>luizamaria@cpovo.net</u>; 4Nurse, Doctoral student in Nursing, School of Nursing, Federal University of Rio Grande do Sul. Porto Alegre (RS), Brazil. E-mail: <u>caroImprede@gmail.com</u>; ⁵Nurse, PhD, Professor of Education, School of Nursing, Federal University of Rio Grande do Sul. Porto Alegre (RS), Brazil. E-mail: <u>evapedro@enf.ufrgs.br</u>; ⁶Nurse, Professor, PhD in Physiology, School of Nursing, Federal University of Rio Grande do Sul. Porto Alegre (RS), Brazil. E-mail: <u>mbreigeiron@gmail.com</u>

INTRODUCTION

Patient safety is a problem that has been increasingly addressed in recent years. Working on this theme means understanding the human being, in this case, the health professional, as liable to error, and this may occur in any health care environment or circumstance.

Patient Safety is understood to be the minimally acceptable reduction of the risk of unnecessary harm associated with health care.¹ An incident or incident of patient safety is an event or circumstance that may have resulted in or resulted in unnecessary damage to the patient. Incidents that cause harm to the patient are called adverse events, that is, the damage is caused by health care, which was not caused by the underlying disease, which can prolong the patient's time of permanence or result in a present incapacity at the moment of hospital discharge.¹⁻² A contributing factor is another important term, when referring to patient safety, which may be a necessary precursor to an incident and may or may not be sufficient to cause harm. This can be related to professional factors (cognitive, performance. behavioral and communication), work (environment) and organizational (institution) .¹ The term safety culture is one in which all employees, employees, patients, family members and visitors prioritize safety in the care which processes, encourages the communication of adverse events, as a form of organizational learning, to avoid their repetition and that promotes a no-fault environment for these communications.¹

In order to contribute to the qualification of health care, the Brazilian Ministry of Health established the National Patient Safety Program (NPSP), through Ordinance No. 529, of April 1, 2013. Among its objectives, are: to promote and support the implementation of patient safety initiatives through the Patient Safety Nuclei in health facilities; involve patients and family members in safety promotion actions; expand society's access to patient safety information; produce, systematize and disseminate knowledge about patient safety and foster the inclusion of patient safety in technical, undergraduate and postgraduate health education.

The patient's safety towards the hospitalized child implies the responsibility of a care provided to beings in constant English/Portuguese

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growth and development, which brings greater risks and specificities of the care process due to the particularities of this moment of life.³ The recognition of the child as being vulnerable, bv the multiprofessional team, becomes extremely important, since it allows a more careful monitoring of the cases and the accomplishment of health care in an integral way³, in which aspects related to patient safety should be glimpsed. In this context, hospital units destined for pediatric hospitalization expose the child to several situations that may generate additional safety risks, especially, those for intensive care.

In the Pediatric Intensive Care Unit, safety risks are explained by the probability of occurrence of incidents being related to the severity of the disease and the intensity and complexity of the care. Within the complexity of care, errors related to medication point to the lack of health policies and the pharmaceutical industry aimed at attending to the specificities of the pediatric population.⁴ In addition, the high instability of intensive care patients predisposes to constant changes in the performance of during treatment. This particularity, coupled with the large number of triggered alarms and monitoring devices designed to protect patients, have led to increased noise in the unit, alarm fatigue, distractions and interruptions in the workflow, and false sensation of patient safety⁵, and may contribute to the occurrence of adverse events in these units.

The purpose of a patient safety incident reporting system is to build a culture in which, after the occurrence of the incident, the professional can understand the risk factors involved, as well as devise strategies to avoid repetition of the incident. The hospital in which this study was carried out uses a system of safety incident reporting on the Health Surveillance based Notification System (NOTIVISA).6 The purpose of this system is to record and process data on adverse events and technical complaints throughout the country Brazilian territory, providing information for identification, evaluation, analysis, among others, thus contributing to decision making at the municipal, state, district, and federal level.6

The recognition of the occurrence of patient safety incidents, as a reality in health care, stems from the consideration of

the multiplicity of human factors and fragilities that exist in care processes, which predisposes them to error. In this sense, it is essential to analyze the causal factors of the incidents, so that measures can be identified to prevent harm to the patient.

Based on this assumption, this study had the following research question: what are the patient safety incidents that occur in units that provide pediatric intensive care?

OBJECTIVE

• To outline the profile of reported patient safety incidents in a Pediatric Intensive Care Unit (PICU).

METHOD

Quantitative, cross-sectional, descriptive study. The data were extracted from the system of notifications and documentation of patient safety incidents, made available by the Risk Management of a large public university hospital in the South of Brazil. We analyzed the 115 reports of security incidents from the PICU during 2014, considering a total of 159 hospitalizations occurred in this period. This year's election occurred as a result of being the first year after the orientation of the NPSP that established the notification and follow-up of incidents in health services.

The Risk Management of the research institution acts in the management of patient safety incidents. It is composed of a multiprofessional Executive Committee, which analyzes the serious events and sentinels; 14 sub-Commissions on Safety and Quality (s-comseq), operating in the operational areas and three Standing Committees, which analyze the falls, the prevention of skin lesions and the safe use of medicines. The commission for the safe use of medicines evaluates safety incidents, separately, and covers the entire process of drug use at the institution. The s-Comseq PICU analyzes the moderate and light events of this unit.

The notifications of security incidents can be done manually by means of an individual file, which is deposited in ballot boxes in the care areas, or by means of an electronic system, available on the hospital intranet, where all employees have access. The notification may be anonymous, if the notifier wishes or, furthermore, the same may identify itself and receive feedback of the referrals referring to the fact occurred.

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Privacy in the analysis of incidents is premised on the work of Risk Management and other committees, and reporting data are used for further analysis and planning of safety improvements in the relevant areas.

The PICU, the focus of this study, serves patients in the age group between 28 days and 12 years of age, extending care to adolescents up to 18 years in some clinical specialties. Currently, the UTIP has 13 beds and counts on the assistance of a multiprofessional team, consisting of nurse, Nursing technician, physician, nutritionist, physiotherapist, psychologist, social worker, pharmacist and physical educator.

The data of the notifications were organized in an Excel spreadsheet in an institutional database and classified based on the type of incident, degree of damage occasioned, contributing factors and turn of occurrence, according to the variables of NOTIVISA.⁶

According to the Risk Management of the institution researched, data were available regarding the identification of the notifier, identification of the patient and suggestion of strategies presented by the notifiers to prevent recurrence of the incident. The incidents involving medication were analyzed separately, because there was a commission to analyze the incidents of the hospital regarding medicines, as already mentioned.

The data of the notifications were accessed and used through the Term of Commitment for Use of institutional data, with the purpose of guaranteeing the researchers' commitment to preserve the identification of the professionals mentioned in this database, accessed during the collection of information for the study.

Data analysis was performed using descriptive statistics and the results were expressed in relative and absolute frequency.

The study is part of the research project, "Patient Safety in Hospital Attention Services for Children in the City of Porto Alegre / RS", developed by the Group of Studies and Research in Nursing, Education and Technologies (GEPEETec), belonging to the School of Nursing at the Federal University of Rio Grande do Sul (UFRGS).

Ethical aspects were respected according to the Guidelines and Norms Regulating Research on Human Beings, Resolution 466/12, of the National Health Council of Brazil.⁷ The project was approved by the Ethics and Research Committee (REC) of the research institution under CAAE No. 45330815.7.0000.5327, in August 2015.

RESULTS

In 2014, the PICU recorded 159 hospitalizations, with 115 reports of patient safety incidents, which indicates an incidence rate of 0.72 security incidents per inpatient. All reported incidents occurred in different patients.

Regarding the type of incident and its subclassifications (Table 1), 87% of reports were related to failure during health care; 5.2% resulted from failure of the

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documentation system; 4.3%, administrative activities; 2.6%, of dietary intake failure and 0.9% were related to burns. All notifications related to staff management failure, team work overload, medication errors, among others, totaling 50 of the 57 notifications classified in this category were classified as General Assistance Incidents, belonging to the item "Failed During Health Care", all notifications related to personnel management failure, team work overload, medication errors, among others, totaling 50 of the 57 notifications classified in this item. There was no notification of falls and / or pressure ulcers.

Table 1. Types and number of safety incidents reported in a Pediatric Intensive Care
Unit in 2014. Porto Alegre (RS), Brazil, 2017.

Type of incident	Num of events	%
Failed administrative activities	5	4.3
Patient transfer	5	4.3
Failure during health care	100	87.0
Diagnosis / complementary means (exams)	7	6.1
Procedure / treatment / intervention	35	30.4
General assistance	57	49.6
Physical Containment	1	0.9
Failure to administer diets	3	2.6
Supply	2	1.7
Management	1	0.9
Documentation failure	6	5.2
Instructions / information	3	2.6
Labels / tags	3	2.6
Burns	1	0.9
Burn	1	0.9
Total	115	100

Incidents related to the drug process, which totaled 23 out of 115 reports, were classified in the subcategories "procedure / treatment / intervention", "general care" and "labels / labels", as described in Table 1, and stratified in table 2, according to stage and / or cause of its occurrence.

Table 2. Classification of medication-related incidents reported in a Pediatric Intensive Care Unit in 2014. Porto Alegre (RS), Brazil, 2017.

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Stage and / or cause of its occurrence	Num of events	%
Prescription	11	47.8
Preparation / dispensing	2	8.7
Presentation / packaging	2	8.7
Wrong Patient	2	8.7
Dose / frequency is wrong	2	8.7
Wrong amount	3	13.0
Incorrect label / admin instruction	1	4.4
Total	23	100

Regarding the factors that contribute to the occurrence of incidents, these were classified as: professional, cognitive, performance, behavior, communication, work / environment and organizational, as recommended by NOTIVISA.6 (Table 3)

Among the contributing factors selected, the highest number of notifications for the professional factors stands out. Included in this category, were notifications related to carelessness, noncompliance with standards, violation of routines, reckless behavior, poor adherence to hand hygiene practices, flaws related to diet change communication, bed change, pre-procedure care, and exams , as well as conversations at inappropriate times, such as during the

DOI: 10.5205/reuol.10712-95194-3-SM.1110sup201726

preparation of medicines

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among professionals in the workplace.

Table 3. Contributing factors related to safety incidents reported in a Pediatric Intensive Care Unit in 2014. Porto Alegre (RS), Brazil, 2017.

Contributing factors	Num of events	%				
Professional factors	96	83.5				
Work / environment factors	7	6.1				
Organizational Factors	12	10.4				
Total	115	100				

Regarding the general rate of adhesion to the hands hygiene of the PICU professionals, an annual average of 66% of adherence to this practice was identified, and the established institutional goal was 75% for the year 2014. Categorized data indicate, as 2014, **95**% in the year of the physiotherapists, 73% of the nurses, 67% of Nursing technicians, 59% of the the laboratory collectors and 56% of the medical staff adhered to the practice of hand hygiene.

In addition to the general adhesion rate to hand hygiene, hospital infections in the PICU are also associated with the large number of invasive procedures to which the children, in intensive care, are submitted. Regarding the data regarding the infection from rate resulting invasive urinary procedures, for the year 2014, 1561 procedures of this type were performed, in the PICU, of which 13.2% generated hospital infection. In the same year, in the PICU, infections related to the installation, use and maintenance of central venous catheter occurred in 13.3%, of a total of 3,006 procedures involving this device.

In relation to the shift in which the incident happened, it was analyzed based on the completion of the notification. The data are described in table 4.

Table 4.	Turn	of	occurren	ice of	reported	safety	incidents	in	а	Pediatric
Intensive	Care I	Unit	in 2014.	Porto	Alegre (R	S), Braz	il, 2017.			

Shift	Num of events	%				
Morning	57	49.6				
Afternoon	28	24.3				
Night	24	20.9				
Incomplete data	5	4.3				
Absence of data	1	0.9				
Total	115	100				

Regarding the presence / absence and the avoidable degree of damage (Table 5), the incidents were classified as mild, moderate and severe. Were classified, as mild incidents, those in which the child presented mild symptoms, minimal damages short-term intermediates, or without minimal intervention (small treatment or observation). Moderate incidents were those in which the child needed intervention (additional or additional therapy),

prolongation of hospitalization, loss of function, permanent or long-term damage. As serious incidents, those who required medical / surgical intervention to save life or caused great permanent or long-term damage were classified.⁶ In addition, 47 incidents classified as adverse events were identified as having caused some degree of harm to the patient, which represents, approximately, 40.8% of total reported incidents.

Table	5.	Degree	of	incident	damage	reported	in	Pediatric	Intensive	Care	Unit	ir
2014.	Ро	orto Aleg	re	(RS), Braz	zil, 2017.	•						

Degree of damage	Num of events	%
None	41	35.6
Light	26	22.6
Moderate	15	13.0
Serious	5	4.3
Death	1	0.9
Missing data	27	23.5
Total	115	100

Other data were also evaluated, according to the presence or absence of response to the information requested in the record by the notification system, such as: identification of the notifier, identification of the patient (name) and suggestion of strategies for improvement. Such information is not mandatory in terms of completion, but when made available in the notification form, it is extremely important to implement the safety culture in the pediatric context. The majority of the items "patient identification" and "strategy suggestion" were filled out, being present in 58 (50.4%) and 69 (60%) of notifications, respectively. In a total of 115 notifications, in 27 (23.4%) there was the identification of the notifier, totalizing 88 (76.5%) notifications filled in anonymously.

Among the suggestions of strategies presented by the notifiers for prevention of incident recurrence, the following should be highlighted: differentiate medication labels appropriately; attenuate communication regarding bed or unit transfer; follow institutional protocols; improve family care orientation; advise professionals regarding ANVISA, Regulatory Norm 32 (NR32); doublecheck the medical prescription before the execution: increase the number of employees and adequate coverage of vacations.

DISCUSSION

In the year 2014, 72% of patients admitted to the PICU were involved in some type of incident resulting from health care. Of the total incidents recorded, 40.8% were classified as adverse events because they caused some degree of harm to the patient. This value surpasses that presented in another study, that evaluated the incidence of adverse events in Brazilian hospitals, where the occurrence of events was 7.6%, with a global proportion of 66.7% of preventable adverse events, such as execution errors or these results⁸ were obtained from adult patients, hospitalized or assisted in several hospital sectors, as well as an intensive care unit, which may justify the expressive contrast with the results of this study, carried out only in PICUs, regarding the rate of adverse events.

The results show that, for the reported type of incident, approximately 50% of these are classified in the category "Failure during health care" in the subcategory "general assistance". During the reading and analysis of the notifications, it was observed that a large part of those included in this category is included in the item "work overload", in which the description of the notification evidenced risk factors for the occurrence of incidents, due to personal stress and number not of professionals per patient in the PICU.

A study carried out in a large hospital in the South of Brazil, aiming to analyze the patient safety related to the workload of the Nursing team, brings a significant association between workload and adverse events such as bed falls and infections related to the central venous catheter . These indicators are directly proportional to the number of patients assigned to each nurse or Nursing technician, evidencing the impact of absenteeism and the turnover of professionals in the quality of Nursing services.⁹

In addition to the workload, it is also necessary to consider the issues related to the work day, which often goes beyond the stipulated time, leading, therefore, to a greater exposure of the professionals to commit failures and, in the case of intensive care units, this risk is even greater.¹⁰

Another study carried out in the ICUs of a large hospital in the city of São Paulo, with the objective of identifying the main causes of medication errors in the respective units, identified that 55% of Nursing professionals consider work overload as the main factor risk of errors. The same study also points out that, in comparison to the ICU for adults, it is expected that the pediatric ICU is the field with the highest incidence of adverse events, considering the peculiarities of child care in the drug process.¹¹

According to the reports studied, the second major cause of patient safety incidents were failures related to care procedures during / treatment 1 intervention, which include incidents related to the drug process. Failures related to the drug process point to the need to provide greater adequacy in drug preparation and, consequently, greater safety in child care.12

A qualitative case study, carried out at the hospital under study, focusing on the units for clinical and oncological hospitalization in pediatrics, analyzed the main causes of adverse events from the perspective of professionals and caregivers. Both highlighted medication errors as the main concern regarding the occurrence of adverse events.¹³

A study carried out with 39 participants, among nurses, technicians and Nursing assistants working in a Pediatric Intensive Care Unit, showed that for 16 of these

professionals, the main risk factors of the medication process are: fractional doses, incorrect prescription, , manipulation, dispensing, dilution calculations, pharmacy standardization, infusion time, and drug stability.14 These factors resemble those highlighted in this study, which presented prescribing errors as the major cause of incidents in this category.

Regarding the "Factors contributing to incidents", the occurrence of the professional factors were highlighted. A study carried out in a neonatal intensive care unit, with the objective of identifying the knowledge of the Nursing team of this sector about the control of nosocomial infections, identifying factors that facilitate or hinder their occurrence, presented, as a result that Nursing professionals consider as a major contributing factor, the lack or improper practice of hand hygiene before contact with the patient.¹⁵ It is a fact that professionals recognize this failure in the care process, and it is therefore appropriate to identify the factors responsible for the low adherence.

Studies related to the practice of hand hygiene, coupled with the number of notifications related to the low adherence to this practice and the data presented by the Risk Management of the institution researched, confirm the importance of an investment in the permanent education of the professional, aiming to change behavior to carry out this practice, systematically and routinely.

In relation to hospital infections, related to the large number of invasive procedures, 13.3% of the central venous catheters and 13.2% of the invasive urinary procedures generated hospital infection. A study with the objective of describing the magnitude of infections in Pediatric and Neonatal ICU points to infections of the bloodstream, by use of central venous catheter, as a major infection, accounting for 33% of the cases analyzed, where urinary tract infections account for 8% of the cases. cases studied.¹⁶

Among the contributing factors of professional order, incidents related to the communication process were found. Effective communication among health professionals is essential for excellence and quality care. Any information submitted, or misinterpreted can lead to several types of incidents that compromise patient safety. In the hospital environment, clinical information should be consistently

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transmitted, requiring staff skills and attitudes and, in particular, adequate communication. Among the consequences of communication failures are patient harm, increased hospitalization time and inefficient use of resources.17 Among the strategies used in the institution studied, there is a computerized and integrated system for recording staff work multiprofessional, where the Systematization of Nursing Care (SNC) is linked. SNC is a strategy that favors and individualized quality care, with effective communication, both verbal and written..¹⁸

A survey to identify medication errors reported in a pediatric hospital presented 21.4% of errors caused by communication failure, 11.9% verbal and 9.5% written.¹⁹ Written communication, within of the hospital context, adds prescriptions, evaluations, procedures and care carried out by the various professionals of the health team, thus, being overly complex records, containing important information for patient monitoring.

A study developed in a public and university hospital has defined prescribing errors as those drug prescriptions that involve patient identification, medication, dose, frequency, route of administration and / or wrong pharmaceutical form, inappropriate duplicate or redundant therapy, documented allergy to prescribed drugs, contraindicated therapy, among others. The same study identified the similarity between the main errors, omission of one or more patient identification items (27.5%) and prescription with ambiguous / confused interpretation (27.5%). ²⁰ These data confirm the correctness of the investigators' decision to analyze the drug process separately from the other types of adverse events. In this perspective, it could be recommended that Patient Safety Nuclei (PSN) analyze drug-related adverse events separately from other types of adverse events. During the analysis of the occurrence of the adverse event, it was observed that in the morning and afternoon shifts, the highest number of notifications occurred (73.9%), where the great medical, occurrence of Nursing and examination procedures is performed, on the morning shift. Research performed in a hospital located in the State of São Paulo shows similar results, in which 92.8% of reports of adverse events and incidents

Regarding the degree of damage, in this study, 40.8% of the patients presented damages from the reported incident, being classified as adverse events. On the other hand, 23.5% of the notifications were not filled in the data referring to the patient's injury, making it difficult to describe a reliable result for this factor. The fact that many incidents may not cause immediate or obvious harm to the patient could be one reason for failure to complete this data at the time of notification. Added to this is the fact that 76% of the notifications of this study were sent anonymously, and may indicate fear of the notifying professional for the occurrence of punishment by the institution. Another study on the reporting of adverse events in ICU reinforces this interpretation, since 21.4% of nurses showed little or no confidence to notify due to fear of being punished by the institution and its consequences.22

These results reflect the need for the safety culture to be worked out from the academic training of the professional and in the programs of permanent education of the health services, so that the professional understands the true purpose of a notification, always aimed at the quality of care and safety of the patient. In addition, institutions, in general, also need to change their stance when dealing with adverse events, because if the change is not simultaneous, there will be no chance for practitioners to gain the confidence to complete notifications completely.

Positive aspect, to be highlighted in this study, is that the strategy to identify the risk of adverse event, as a contribution to safe care, was pointed out in 60% of the notifications analyzed. It is believed that this recognition can be considered the first strategy to establish a safety culture in the hospital context.²³

In order to identify the most obvious safety risks, it is essential to encourage the notification of adverse events, in order to enable the detection / recognition of the causes and, thus, to develop strategies that allow the knowledge of the typology, predisposing factors and consequences of the incidents.

The culture of patient safety is an attitude and a commitment that must be shared by both care professionals and

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caregivers and family members in the hospital environment. From this perspective, the characterization of patient safety incidents reported in the PICU can contribute, by exposing reality, the professionals' awareness of their personal responsibility, as well as providing subsidies to establish a partnership with caregivers and family members for safe care.

The high incidence rate identified in this study suggests the existence of an increase in the communication of incidents and risk factors in the field under study, with important repercussions for the prevention of incidents in the health care of children in a critical environment.

It is also necessary to point out the serious consequences of the combination of safety incidents that can lead to the appearance and dissemination of resistant bacteria in the hospital environment, which in itself is already conducive to this risk. Failures in administrative activities (patient transfer), failures during health care (inadequate hand hygiene, incorrect cleaning of materials and equipment, failure to administer medications, such as dose and schedule) and documentation failures (care records or procedures realized or not). For patients, antimicrobial resistance may lead morbidity and mortality. to increased prolonging the recovery period. and increasing the risk of complications. The economic burden is also manifold: for the health service and funding agencies, costs increase with diagnostic and treatment procedures; for the family or caregivers of the child may represent loss of income and additional expenses with transportation and food during the period of hospitalization.²⁴

CONCLUSION

The proposed goal of this study was successfully achieved, since the analysis of the profile of the notifications showed that the rate of security incidents registered exceeds the average of studies carried out in Brazil. However, no studies were found that allowed a comparison for this variable, considering the context of pediatric intensivism.

The study reveals that, for the most part, there were occurrences of adverse events due to failures during health care, with emphasis on errors during the stages of the drug process. The main contributor was professional. Most of the notifications did

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not cause harm to the patient. It was evidenced that the professionals still are afraid of their identification as responsible for the notification, however, they recognize strategies to improve care.

Knowledge of the profile of the incidents brings subsidies to the importance of learning from the reported errors and also highlights the peculiarities of pediatric intensivism, a context with a high risk of occurrence of adverse events when compared to other health care scenarios.

The main limitations of the study are related to the cross-sectional design, that portrays only a temporal reality and the local character of the study, considering that the data were related only to the incidents reported in 2014 and in a pediatric intensive care unit.

As it is a topic in the ascendancy at present, it is expected that the study awakens the increase of safe practices in Pediatric ICUs and investments of hospital institutions, through its managers and other professionals, in strategies of both human resources, materials and equipment, and with the purpose of reducing the risks of patient safety incidents and improving safe care for hospitalized children.

It is recommended the development of future research that addresses the safety of the child in intensive care by making an association between the profile of the severely ill child, the characteristics of the work process of the health team and the degree of complexity of Nursing care.

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Submission: 2017/03/28 Accepted: 2017/09/28 Publishing: 2017/10/15

Corresponding Address

Wiliam wegner Rua São Manoel, 963 Bairro Rio Branco CEP: 90620-110 - Porto Alegre (RS), Brazil