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Patient safety incidents identified by the caregivers of hospitalized children

Identificação de incidentes de segurança do paciente pelos acompanhantes de crianças hospitalizadas

Identificación de incidentes de seguridad del paciente por los acompañantes de niños hospitalizados

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ABSTRACT

Objective: to analyze patient safety incidents identified by caregivers of hospitalized children. **Method**: a qualitative, exploratory-descriptive study was carried out with 40 caregivers of children hospitalized in three hospital institutions in the city of Porto Alegre, Rio Grande do Sul State, Brazil, from April to December 2016. Semi-structured, recorded and transcribed interviews were carried out in their entirety, submitted to a thematic analysis using the NVivo 11.0 software. **Results**: reports related to falls, infant feeding, patient/caregiver identification, medication process, communication, hand hygiene and hygiene of the hospital environment, spread of diseases, relations between caregivers and professionals and care processes/procedures were all cited. **Final considerations**: communication and the relations among caregivers and professionals are the main contributory factors for patient safety incidents, interfering with the quality of care. The participation of caregivers and engagement in child care may be strategies to be developed to promote a safety culture.

Descriptors: Patient Safety; Caregivers; Pediatric Nursing; Pediatrics; Child, Hospitalized.

RESUMO

Objetivo: analisar os incidentes de segurança do paciente identificados pelos acompanhantes de crianças hospitalizadas. **Método:** estudo qualitativo, exploratório-descritivo, realizado com 40 acompanhantes de crianças hospitalizadas em enfermarias de três instituições hospitalares, no município de Porto Alegre/RS, Brasil, no período de abril a dezembro de 2016. Foram realizadas entrevistas semiestruturadas, gravadas e transcritas na íntegra, submetidas à análise temática com auxílio do *software* NVivo 11.0. **Resultados:** emergiram relatos dos acompanhantes relacionados às quedas, à alimentação da criança, identificação do paciente/acompanhante, processo medicamentoso, comunicação, higienização das mãos e do ambiente hospitalar, disseminação de doenças, relação entre acompanhantes/profissionais no cuidado e processos/procedimentos de cuidado. **Considerações finais:** a comunicação e o relacionamento entre acompanhantes/profissionais são os principais fatores contribuintes para incidentes de segurança do paciente, interferindo na qualidade do cuidado. A participação dos acompanhantes e o engajamento no cuidado da criança podem ser estratégias a serem desenvolvidas para a promoção da cultura de segurança.

Descritores: Segurança do Paciente; Acompanhantes de Pacientes; Enfermagem Pediátrica; Pediatria; Criança Hospitalizada.

RESUMEN

Objetivo: analizar los incidentes de seguridad del paciente identificados por los acompañantes de niños hospitalizados. **Método:** estudio cualitativo, exploratorio-descriptivo, realizado con 40 acompañantes de niños hospitalizados en las enfermerías de tres instituciones hospitalarias, en el municipio de Porto Alegre/RS, Brasil, desde abril hasta diciembre 2016. Se realizaron entrevistas semiestructuradas, grabadas y transcritas en su totalidad, sometidas al análisis temático con la ayuda del *software* NVivo 11.0. **Resultados:** se han reportado casos de acompañantes relacionados con las caídas, la alimentación del niño, identificación del paciente/acompañante, proceso medicamentoso, comunicación, higienización de las manos y del ambiente hospitalario, diseminación de enfermedades, relación entre acompañantes/profesionales en el cuidado y los procesos/procedimientos de cuidado. **Consideraciones finales**: la comunicación y la relación entre acompañantes/profesionales son los principales factores que contribuyen para los incidentes de seguridad del paciente, lo que interfiere en la calidad del cuidado. La participación de los acompañantes y el compromiso en el cuidado del niño pueden ser estrategias a ser desarrolladas para la promoción de la cultura de seguridad.

Descriptores: Seguridad del Paciente; Chaperones Médicos; Enfermería Pediátrica; Pediatría; Niño Hospitalizado.

INTRODUCTION

The family presence in the hospital environment and their participation in child care is changing care organization, expanding the focus of the care provided by professionals, especially in Nursing, to include caregivers[1]. Their presence during pediatric hospitalization is vital to build safety through information and orientation about care, allowing the active participation of patients/caregivers/professionals, thus respecting their competences and guaranteeing a better quality of care.

Patient safety is having an increasing visibility within hospital institutions, especially in the search for a better quality of care and reduction in incidents[3]. According to the international taxonomy, patient safety refers to the absence of preventable harm to patients during the health care process. In this perspective, any event or circumstance that can cause or caused unnecessary harm is a patient safety incident[4].

Patient safety incidents or simply incidents, which results in harm, are adverse events whose impacts also affect professionals and the institution. Errors, preventable adverse events and risks are classified as incidents. The prevention of incidents, with or without harm, is based on the safety culture, defined as the values, attitudes, perceptions, competencies and behaviors of individuals, groups and institutions that guide health and safety management in an organization[4]. On the other, hand, adverse events, or incidents with damage, are related to an undesired outcome for patients that may or may not be the consequence of an error. As for near misses, they can be situations that involve (adverse events) or not harm patients in incidents, that is, an incident that did not affect the patient. Finally, errors are the failure to execute a certain action planned according to the expected or the incorrect development of a plan[4].

A study carried out in Portugal states that children are more vulnerable to the occurrence of adverse events during hospitalization when compared to the adult population[5]. Studies carried out in the region also show as errors in hospitalized child care related to hospital infection due to poor hand hygiene, lack of protection barriers, such as insulation, poor patient identification, falls, failure of procedures such as venipuncture, incorrect handling of medical and hospital supplies, such as catheters and probes, and the preparation and administration of drugs[6].

Another study that analyzed 556 adverse events which took place during pediatric clinic care indicated adverse events related to vascular access (40.8%) have a higher prevalence, followed by those related to probes, catheters, drains, tubes (27.2%) and drugs (15.5%)[7].

The studies with focus on patient safety and family participation also have as a result the identification, by caregivers, of incidents in the most varied care processes, especially those related to the communication and information of caregivers, performing invasive procedures and caregivers participating in care. The knowledge they have about the treatment and procedures needed for their children can contribute to safety, reduce negative feelings, prevent adverse events and enable them to participate in hospital routines, playing an active role in the care that is also entrusted to them outside the hospital environment. This becomes feasible when there is active listening and partnership between professionals and caregivers for child well-being[2-8,9,10].

Research finds justification on the need to explore the experience of caregivers in the face of safety protocols widely discussed within institutions. Nonetheless, it is extremely important to identify events or incidents that may cause or are potentially harmful to pediatric patients, considering that the presence of caregivers may be intensifying factors to prevent adverse events from happening[8]. The first step towards training caregivers is to know their understanding of these incidents in Pediatrics. Thus, the question that guided this study was: What are the safety incidents identified by the caregivers of hospitalized children?

The learning provided by the analysis of safety incidents in this study identified by the caregivers of hospitalized children is one of the characteristics of the organizational safety culture needed for the sustainability of strategies for incident prevention[4].

OBJECTIVE

To analyze patient safety incidents identified by the caregivers of hospitalized children.

METHODS

Ethical aspects

The caregivers who accepted to participate in research signed the Free and Informed Consent Term. Research was approved by the Research Ethics Committees of the three participating institutions, named A, B and C, respectively, under the numbers 1.221.489, 1.120.025 and 1.383.292.

Type of study

A qualitative study with an exploratory-descriptive design. The qualitative approach seeks to understand the actions of individuals, which are the focus of this study, within their reality. Exploratory research aims at an overview, an often-initial approximation of a fact, while the descriptive one has the purpose of describing its characteristics[11].

Research setting

Data collection occurred in three hospitals (Institutions A, B and C), with beds for pediatric hospitalization and intended for users of the Unified Health System (SUS), in the city of Porto Alegre , Rio Grande do Sul State, Brazil, from April to December 2016.

Data sources

A total of 40 interviews were conducted with caregivers of children hospitalized in pediatric wards. Prior to data collection, a minimum of six interviews per nurse was set, but according to the application of the empirical and theoretical information saturation criterion, and considering the length and complexity of this study, there was an increase of interviewees until there were reports of incidents not mentioned previously by the caregivers[11]. Thus, 27 interviews were carried out in institution A, 6 in institution B and 7 in C. In the interviews, caregivers

were included to report the situations experienced during the hospitalization of their children. Caregivers were 18 or older, the children's legal guardians, caring for them for at least seven days in the hospitalization unit, disregarding the time of possible hospitalization in emergencies and/or Intensive Care Units. Those caregivers who did not meet these criteria were not invited to participate in research. Those selected, were intentionally approached at the patient's bedside. The fulfillment of the inclusion criteria was checked with professionals from the health team and on medical records. After that, the invitation to participate in research was made. No one refused to respond to the survey, but one participant requested to be withdrawn from it before its completion.

Data collection

Semi-structured interviews were recorded on a digital device. The semi-structured script addressed issues that sought to capture the caregivers' understanding of the issues surrounding patient safety culture, such as: failures, errors or incidents in the care provided by professionals to hospitalized children and potential actions that affect the patient safety culture under the caregivers' perspectives. Considering this, most caregivers did not have enough knowledge of the topic at the beginning of the interview. However, along the course of questions, they were able to report several aspects pertinent to the defined objectives.

The interviews were carried out by scientific initiation scholarship holders, trained for and skilled in data collection. Upon the acceptance of caregivers, they were taken to a private room inside the hospitalization unit for the interviews, which lasted, on average, 30 minutes. At that moment, their children were cared by another person, who could be a visitor or health professional willing to observe them in the absence of caregivers.

Organization and analysis of data

The interviews were fully transcribed and typed into the Microsoft Word® 2010 software, generating 181 pages of empirical material from the speeches. They were analyzed in their entirety. Participants' statements were identified by the letter P, followed by a number, according to the order in which the interviews were carried out, and the connection to hospital institutions was identified by the letters A, B or C. The material was organized using the software QSR NVivo version 11.0 and submitted to the thematic content analysis proposed by Minayo[11].

RESULTS

The process of analysis of caregivers' speeches allowed to elaborate a single thematic category called "patient safety incidents reported by the caregivers of hospitalized children". This category gathered topics regarding the identification of safety incidents related to falls, infant feeding, patient/caregiver identification, medication process, communication, hand hygiene and hygiene of the hospital environment, spread of diseases, relations between caregivers and professionals, and processes/procedures, all grouped and contextualized.

Safety incidents identified by caregivers of hospitalized children

Among the incidents identified by caregivers are those related to the risk of falls. Although most caregivers stated that there is effectiveness in the care and guidelines connected with the risk of falls, there was a report of a fall from a cradle. Additionally, the risk of falls related to the size of beds in relation to the children's height was also clear for caregivers. The lack of education and the reinforcement of guidelines for caregivers regarding the importance of bedside care was also a risk enhancer. The speeches illustrate this:

> [...] *He fell down from the cradle, just look at its barriers. My badge dropped and when I turned to get him, he turned over the barrier and hit his head against the floor* [...] (P2, Institution A).

> [...] *There are smaller children and big barriers... if it was the barrier was adequate it would be on her chest, and then se would be safe and wouldn't hang on it, mas hers is much lower* [...] (P9, Institution A).

Another moment of risk for falls was caregivers changed shifts, since their children could be left unattended and without supervision for some time.

The identification of patients was also a weakness noted by caregivers. In most of the interviews, they mentioned that the actual verification of the identification bracelet was performed only at the beginning of the shift. Failures to check them were identified in new opportunities, such as when administering medications, performing procedures or examinations. In these situations, the professionals preferred to check the patients' data in the chart or in the identification set in the bed:

> *No, only the identification bracelet is checked when shifts change* (P18, Institution A)

Caregivers said some patients were without there identification bracelets, then transferred to another unit or remained hours without this identification until a professional noticed its basence:

> *Yes, he was downstairs, so they didn't put the bracelet on, he came here without the ID bracelet on his little arm* [...] (P17, Institution A).

An aspect also framed as a factor related to patient safety was the lack of identification of caregivers and visitors in the hospital environment:

> [...] *this is a matter of using a pattern, which criterion is used for caregivers to enter their children's room* [...] (P2, Institution A).

In relation to food, caregivers identified flaws related to delays or omissions when delivering meals, changing the patient's diets or between patients, inadequate temperature of the bottles, failures in the infusion rate of enteral nutrition and dirty bottles given to patients:

> [...] *today, for example, I asked for it at 6:15 a.m.* [...] *at 7:30 a.m. there was no sign of his bottle. This shows an indifference as to a child's feeding* (P2, Institution A).

> [...] *She had to wait for 6 hours for her bottle, they skipped two meals* [...] *And when she came here the same happen, she didn't receive her meal from 2 p.m. to 8 p.m.* (P32, Institution C)

As for the drug process, there were delays, neglect of the professionals in the administration, failure in the administration through enteric probes, medication already suspended administered by problem of legibility in the prescription, medication loss, confusion with medications among patients with the same name, failures in the pass-through of information among professionals and in the orientation of caregivers regarding the drug treatment and omission in the dose administration:

> [...] *some medications should be administered at 8 a.m. and they show up only at 9:10 a.m., you know...* [...] (P30, Institution C)

> *Actually, she used her pen, initialed the papers and they thought the medication had been suspended* [...] (P32, Institution C)

There was also the report of a near miss identified by the caregiver, demonstrating the importance of family insertion in the safety culture of health institutions:

> [...] *she was going to perform nebulization in my son, except he had already done it, so I told her* [...] (P1, Institution A).

Regarding the process of hand hygiene, although most caregivers observed the use of gloves at some point in the care, few identified the correct hand hygiene, especially in the essential moments of care. According to a caregiver, there are situations in which hand washing becomes paramount, but it is replaced with hand sanitizers:

> *They don't wash their hands often* [...] *they barely put on hand sanitizers and touch other children* (P21, Institution A)

> *It's too little. I see them touching one child and another all the time, with no hand hygiene* [...] (P7, Institution A).

There were also flaws in the guidelines for sanitizing the hands of patients' caregivers and visitors, and for cleaning nozzles, toys, bottles and clothes that fall on the floor. Structural problems, such as the lack of sinks at the entrance to the rooms, were also pointed out as factors that can cause incidents of this nature. For some interviewees, hand hygiene, both of professionals and caregivers, should be a point to be worked within hospital institutions, given it is an important care to prevent cross-infection and patient contamination, which do not always happen because of those involved:

> *No, sometimes mothers come and go and don't wash their hands. Even doctors not wearing gloves touch one child and just touch another* [...] (P9, Institution A).

In addition to it, the sanitizing the environment was also a contributing factor considered important by some interviewees, an aspect that should be improved in the hospital environment. The lack of collaboration of Nursing professionals in maintaining a clean environment, inadequate hygiene of rooms, odors coming from the sinks and the strong fragrance of cleaning products were also highlighted by caregivers:

> [...] *On the weekends, it's always calmer. Sometimes, there's a bad smell in the room* (P21, Institution A)

> *I would clean it, because they used bleach in the bathroom yesterday and he couldn't breath* [...] (P17, Institution A).

The violation of institutional rules, which contribute to maintain clean spaces, is also pointed out in the speeches as something that harms the cleanliness of environments:

> *This issue of eating inside the room, there are three or four that comply with the regulation. Parents cannot eat in the rooms, it may attract animals in* (P8, Institution A)

There were also incidents in relation to the care to control the spread of microorganisms. According to caregivers' speeches, the care to separate children with contagious diseases from other patients is not always performed. The lack of identification of the isolation beds, as well as the guidance for caregivers regarding the use of personal protective equipment were also perceived situations:

> *When he came here he was under restriction, no one could touch him and I could only enter with an apron in the room and on the first and second day no one had warned me about it* (P17, Institution A).

The statements also indicate the caregivers' concerns about the prolonged stay in the emergency room with several patients, due to the risk of infection and the structure of the wards. They are inappropriate for so many children and the beds do not keep a proper distance between them:

> [...] *Last week, there were two children with adenovirus [...] but the beds are not even one meter away* [...] (P37, Institution B)

> [...] *It is precarious putting seven children together and then a child with H1N1 arrives... it harms everyone. Or there's a kid who's just been waiting for them to schedule their test for weeks ago, she/he had nothing, and now she/he got the flu, feeling bad. I believe this affects their safety* [...] (P8, Institution A).

The shortcomings in the communication process were related to the lack of information conveyed to caregivers, in a clear and timely manner, e.g., at the moment of communicating results and being open to dialogue. These initiatives allow to information sharing and answering questions about drug therapies, food and changes in therapeutic behavior. The communication between hospital services and the hostile treatment to caregivers, when asked about the therapeutic behavior, as well as the professional's approach with the family to inform the severity and prognosis, are points to be improved:

> *I think every medication they are going to give to my child* [...] *I must know what is being given* [...] *because if there is any reaction you don't know what happened* [...] (P2, Institution A).

> *Sometimes I ask something, and they look at me like "you still don't get it?". I also ask, "What is he taking?", "Oh, you don't what the time?". Some people answer me* (P21, Institution A).

> [...] *a doctor told me* [...] *she wouldn't live through Monday given her situation* [...] *Then my husband told the doctor that for sure doctors are those who know everything, but actually only God knows it* (P28, Institution A).

One point that was also raised by an interviewee is the occurrence of some flaws to convey information and the delay in reporting changes in medical conduct among professionals. Ineffective communication among professionals was also noticed by caregivers, when there is mismatch of information between professionals:

> [...] *there is a lot of misinformation between one nurse and the others "ah, I didn't know that, I'll ask so-and-so"* [...] *sometimes so-and-so doesn't know either and says "I forgot to write it down"* [...] (P2, Institution A).

Caregivers understand that information and attention to the warnings are points to be improved, because they avoid flaws, just as caregivers must meet the requests of the health team to avoid conducts that could harm patient treatment:

> [...] *I told her "I know my son's treatment". I know people can be clumsy sometimes, we're talking about human beings, I'm not condemning them for it. I'm just asking you to go and review the folder because it's wrong* [...] (P37, Institution B).

In addition, according to a few interviewees, some professionals do not take care of children adequately when, for some reason, they are far from the room, and understand that it is a failure in care that can pose risks to safety:

> [...] *When we need to eat they say "yeah, go eat and we'll stay here"* [...] *some say that and when we come back, children are screaming in the rooms* [...] *they stay alone* (P38, Institution B)

> *Just imagine if one of these children is alone, cries and chokes on it. Considering my child has respiratory problems, when she cries too much she can't breathe* [...] (P7, Institution A).

The delay to answer the call from caregivers, and the consequent need to go search for the professional, besides the non-fulfillment of their requests, were also flaws pointed out by the study participants:

> [...] *I see they're chitchatting in far places and, sometimes, there's a desperate mother urging for help, and when she calls the nurses they say "we can't go now", and walk by* [...] (P2, Institution A).

For the caregiver, the distraction and time spent on electronic devices and digital media may contribute to failures in care and be aggravating factors:

> [...] *Every now and then they're sitting there, and I don't know if they're on WhatsApp or something else on the cell phone, or shopping online* [...] *but I think it disconnects you from the environment, the context where you're living in* [...] (P2, Institution A).

Another noteworthy point, representing the feelings of some caregivers, is the fear of complaining about the care provided by professionals, because it could affect the quality of care to their children:

> *Yeah, if you complain they'll pick on you because of it* [...] *That's why no one says anything, it can get worse later* (P30, Institution C)

Incidents in the care processes/procedures were also mentioned. Failures of this nature related to delayed referrals and definition of therapeutic management for patients are examples, such as surgical procedures, exams, bedside transfer to bed and patient transport:

> [...] *Today, in fact, he needed to do an x-ray, it was urgent and the licensed practical nurse said he wouldn't do it because she couldn't, but actually she could* [...] *I complained about the surgery delay of my son at the Ombudsman and they said there was nothing they could do* [...] (P21, Institution A).

> *Now, for instance, she may get anything and she's ready to go home* [...] *it is a risk if she gets anything else* [...] (P38, Institution B)

Caregivers realized that the delay in these processes is harmful to patients and causes delays that compromise patient safety:

> [...] *I noticed that the surgeries were not taking place because the beds were not being freed* [...]*, because the responsible units did not come for the patients* [...] (P30, Institution C)

Regarding the flaws in care procedures, the interviewees cited a lack of care of probes, inadequate checking of vital signs, lack of cleaning of bedding materials, excessive attempts at venipuncture and materials which could pose risks forgotten on the patient's bed:

> *I think the last time they had to put a catheter in her they stuck her a lot. So, she said, "let's call the ICU nurse." They could have called before sticking her like that* [...] (P38, Institution B)

> [...] *she came to check my daughter's signs and I was distracted, then my daughter looked at her and said, "wait a minute, there's nothing been shown"* [...] *she looked at me and put it back. I think that, as nothing appeared, she would put anything and leave* [...] (P28, Institution C).

The way they treat children when procedures are being conducted is also considered an incident. In some speeches, the annoyance of caregivers is clear when a professional performs in an abrupt and neglecting manner, or when caregivers cannot be present in the procedure next to their children:

> *When they're about to do a procedure, they lock themselves in the room with the patient, caregivers can't enter there. By then, the patient is already nervous, he/she changes, contracts the limbs, bursts his veins and loses access* (P5, Institution A).

In the speeches, caregivers also perceive the lack of enough materials and equipment and the precariousness in the hospital structure, such as rooms that make it difficult for caregivers to stay with the patient and the lack of an environment adapted for children with physical impairments, interfering in the service of the professionals who find it difficult to access the beds:

> [...] *Last night, a little baby had seizures, his mother was lying down and when it happened the nurse had to jump over her* [...] (P24, Institution A).

> *I think there is a bit of a problem with accessible restrooms, because inside them there is no wheelchair for a bath* [...] (P30, Institution C).

> [...] *I read "push the button in case of something"; so when I checked it there was no button, I think there's nor even a screw* (P17, Institution A).

From the testimonies, the adoption of practices that meet the protocols of falls and identification of patients, for example, are verified. Nevertheless, they converge to the occurrence of incidents, proving the need for improvements in nutritional assistance, the drug process, the prevention of infections, communication, the relations between professionals and caregivers in child care, among others, to enhance safety in processes/care procedures for hospitalized children.

DISCUSSION

Although several situations related to patient safety were mentioned, this topic is still little known by most of caregivers. This is reflected in the difficulty that the interviewees demonstrated in identifying situations of risk, failure or incidents. In most of the interviews, the reports arose when safety issues were contextualized and exemplified by the researchers.

Incidents, especially adverse events, are a large part of morbidity and mortality rates in health institutions[12]. Caregivers mentioned multifactorial issues related to safety, the most concerning aspects were those of limited communication, lack of attention to patients and divergences in the relations between caregivers and professionals.

The risk of falls in this context generates insecurity and is related to the development of children, their treatment or even the hospital environment[13]. The reports revealed the lack of information regarding fall prevention, requiring the engagement of the multiprofessional team in the evaluation of risk factors and in the education of caregivers[3].

The identification of children permeates all stages of care. However, it can be hampered by the child's inability to communicate effectively, helping to identify errors. The presence of two patients with the same or similar names may also predispose to identification errors[14], as well as the checking of the missing or impaired identification bracelet due to a prolonged hospitalization. This excess of confidence acquired by professionals can be detrimental. Therefore, constant vigilance and information tracking and patient identification are determinants of safe care[15]. In addition, measures to identify hospital admissions are also essential for the physical safety of patients and caregivers.

The failures related to nutrition are often due to errors in the communication process among professionals. These errors can prolong the period in which the child is left without food or with an inadequate diet. As a result of these failures, patients may suffer serious damage to their treatment, such as suspended surgeries, procedures and exams[12]. Besides communicating about changes in diets, professionals should check the food at the time of delivery and prior to administration.

One study pointed to drug therapy as the second major cause of errors in pediatric hospitalization, mainly related to omission in administration, error in the route of administration and dosage[16]. Another study carried out with pediatric nurses revealed that 62% (162) mentioned errors in drug administration, such as incorrect preparation, route of administration and incorrect dosage of medication, most of which were not reported[17]. Sometimes the fear of punishment intervenes in the work process, so it is fundamental that managers notify mistakes, eliminating the feeling of punishment linked to failures and encouraging this practice to learn from mistakes[17].

Incorrect hand hygiene is a transmission factor of infections, which can generate more social costs and impacts for patients and health institutions[18]. An observational study revealed that of the 209 observations of hand hygiene opportunities, only in 87 (42.63%) of the cases it was performed[18]. Hand hygiene is often hampered by the simplification of steps for faster care delivery, although professionals are aware of its importance in combating care-related infections[19].

It is important to reinforce the education of professionals regarding hand hygiene, besides the use of gloves, at the recommended moments, feedback to professionals, attention to individual and collective protection equipment, due signaling of insulation, maintenance of clean environment and goal setting with the engagement of all stakeholders[12-19].

Ineffective communication is present in more than 70% of errors in health care, causing harm to patients, prolonging hospitalization and resulting in inefficient use of resources[20,21]. According to caregivers, effective communication was sometimes seen as a weakness of the system. Therefore, it needs to be qualified as to the treatment, prognosis and behaviors to be taken, establishing a positive relation and approach between professionals/clients/caregivers, in order to prevent errors from happening[15].

The relationship between caregivers/patients and professionals is also a delicate point in pediatric hospitalization. For caregivers, it is essential that their complaints, questions and perceptions are considered. The attentive and individualized look at patients, especially in the absence of their parents, is also considered safe care. The involvement of parents in childcare includes the presence of caregivers, active participation in care and in partnership with professionals, attention to the rights and duties of patients and the need to inform caregivers[8].

This study identified the occurrence of 227 adverse events related to vascular access, of which 114 (51.1%) were errors related to failures in venipuncture, nasogastric and nasoenteric intubation. The procedures needed during the hospitalization of children mobilize patients and caregivers, and it is up to professionals to explain the procedures in advance, enable caregivers to be present during the whole process, perform them safely reducing the anxiety and insecurity and avoid performing the procedure repeatedly[7].

Study limitations

The study limitations were related to the structure of the interview room which was uncomfortable, the apprehension of caregivers in being distant from their children, even when there

was the possibility of being accompanied by another person during the interview, and the previous knowledge of caregivers of patient safety, which may have been a damaging barrier to deepen the topic.

Contributions to the Nursing field

Research is relevant to the field of Health because it encourages the participation of caregivers to identify opportunities for improvement and risk factors for preventable safety incidents. This allows caregivers to participate in the prevention of these incidents, giving voice to those who accompany children during hospitalization.

FINAL CONSIDERATIONS

The caregivers' testimonies point to incidents that involve protocols for patient safety, implemented by specialized organizations and entities. Communication and the relationship between caregivers/professionals are, according to the interviewees' opinions, the main contributing factors for safety incidents, also interfering with the quality of care. Notwithstanding, patient identification, drug and nutritional therapy, hand hygiene and other actions to prevent infections, care regarding falls and procedures such as venipuncture are care processes where incidents occur.

There are multiple factors that predispose to the occurrence of adverse events, either by professional behavior or by caregivers before care, or by institutional factors that do not corroborate the patient safety culture. It is essential that health institutions foster knowledge sharing among patients, caregivers and professionals so that the patient safety culture is spread and care is built through partnership among all those involved.

This study implies a need for further research that promote the participation and inclusion of caregivers to elaborate safe practices and identify safety incidents in the care of hospitalized children. In addition, it is expected that the training process of health professionals is sensitive to the participation of caregivers to prevent incidents and develop the safety culture.

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