

Normalization of deviance in pediatric hospital: perception of health workers



Normalização do desvio em hospital pediátrico: percepção de trabalhadores de saúde
Normalización de la desviación en hospital pediátrico: percepción de trabajadores de salud

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ABSTRACT

Objective: To know the perception of health workers about the phenomenon of normalization of deviance in a pediatric hospital.

Method: Exploratory, descriptive, and qualitative study conducted in a public pediatric hospital in northeastern Brazil in 2021. An in-depth interview was applied to 21 health workers, submitted to Thematic Categorical Content Analysis in the MAXQDA® Software.

Results: 128 context units emerged from the content analysis. These data were presented in three analytical categories, which address conceptions about normalization of deviance, examples and contributing factors. The omission of the practice of hand hygiene and the correct use of personal protective equipment, and turning off alarms stand out as the main deviance perceived by health workers. As contributing factors, human factors and organizational factors prevailed.

Conclusion: Workers perceive the normalization of deviance as negligence, recklessness, and violations of good practices, with consequences for patient safety.

Keywords: Attitude of health personnel. Hospitals, pediatric. Patient safety. Near miss, healthcare. Medical errors.

RESUMO

Objetivo: Conhecer a percepção de trabalhadores de saúde sobre o fenômeno da normalização do desvio em um hospital pediátrico.

Método: Estudo exploratório, descritivo e qualitativo realizado em hospital público pediátrico do nordeste brasileiro em 2021. Aplicou-se entrevista em profundidade a 21 trabalhadores de saúde, submetida à Análise de Conteúdo Categórica Temática no Software MAXQDA®.

Resultados: Emergiram 128 unidades de contexto da análise de conteúdo. Esses dados foram apresentados em três categorias analíticas, as quais abordam concepções sobre normalização do desvio, exemplos e fatores contribuintes. Destacam-se a omissão da prática de higienização das mãos e do uso correto dos equipamentos de proteção individual, e o desligamento de alarmes como principais desvios percebidos pelos trabalhadores de saúde. Como fatores contribuintes, preponderaram os fatores humanos e os fatores organizacionais.

Conclusão: Os trabalhadores percebem a normalização do desvio como negligência, imprudência e violações de boas práticas, com consequências para a segurança do paciente.

Palavras-chave: Atitude do pessoal de saúde. Hospitais pediátricos. Segurança do paciente. Near miss. Erros médicos.

RESUMEN

Objetivo: Conocer la percepción de los trabajadores de la salud sobre el fenómeno de la normalización de la desviación en un hospital pediátrico.

Método: Estudio exploratorio, descriptivo y cualitativo realizado en un hospital pediátrico público en el noreste de Brasil en 2021. Se aplicó una entrevista en profundidad a 21 trabajadores de la salud, sometidos al Análisis de Contenido Categórico Temático en el Software MAXQDA®.

Resultados: 128 unidades de contexto surgieron del análisis de contenido. Estos datos se presentaron en tres categorías analíticas, que abarcan conceptos sobre la normalización de la desviación, ejemplos y factores contribuyentes. La omisión de la práctica de la higiene de manos y el uso correcto de los equipos de protección personal y el apagado de alarmas se destacan como las principales desviaciones percibidas por los trabajadores de la salud. Como factores contribuyentes prevalecieron los factores humanos y los factores organizacionales.

Conclusión: Los trabajadores perciben la normalización de la desviación como negligencia, imprudencia y violación de las buenas prácticas, con consecuencias para la seguridad del paciente.

Palabras clave: Actitud del personal de salud. Hospitales pediátricos. Seguridad del paciente. Near miss salud. Errores médicos.

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INTRODUCTION

Patient safety is a principle and a qualifier of care, materialized from structural, organizational, managerial, responsibility and training measures that prevent the chances of errors and ensure the satisfaction of patients and professionals⁽¹⁾.

In this context, a phenomenon that has challenged health services in promoting patient safety is the normalization of deviance, defined as situations in which people in an organization become so insensitive to an irregular practice that it no longer seems wrong. Insensitivity emerges insidiously, sometimes over years, as several behaviors are veiled and naturalized, and adverse events (AE) do not happen until other critical factors are aligned. Turning off alarms and violating infection control methods are examples of these deviances⁽²⁾.

In clinical practice, the lack of adherence of health professionals to protocols and recommendations of good practices reflects resistance to changes and adjustments in institutional routines⁽³⁾, which remains incorporated into work as something "normal".

The author states that the theme of normalization of deviance reached the health literature only in the last decade, after it became evident that it is an pervasive phenomenon and a threat to patient safety⁽⁴⁾. As an example, a meta-synthesis of qualitative studies showed that non-adherence to standards of care led directly to impaired patient safety and adverse outcomes in all reviewed studies⁽⁵⁾.

Unfortunately, the subject is still inadequately studied and there is a scarcity of literature on its exact nature. One of the reasons cited is that the healthcare sector is submerged in rules and regulations, and there is space for clinical judgment, which makes it difficult to define when a violation has occurred. Other possible barriers to researching normalization of deviance include the absence of quantitative tools to measure the construct. Nevertheless, the discussion on normalization of deviance is urgent and research is needed to elucidate its hidden nature. Health professionals need to be aware of the prodigious responsibility they have to keep patients safe⁽⁴⁾.

Thus, advances are needed in the study of the phenomenon to favor the safety culture in hospitals, mainly in specialties such as Pediatrics⁽⁶⁾, since children are more susceptible to AE. When there is normalization of deviance regarding hand hygiene, for example, the incidence of healthcare-associated infections (HAI) increases⁽⁷⁾.

Sometimes, the professional's motivation to practice a deviance involves the need to help the patient. In Pediatrics, one can mention the procedure of venous puncture, in which some nursing professionals remove their procedure

gloves to have better tactile sensitivity and guarantee the patient's venous network. However, this complacency results in deviance, which impacts patient safety and professional protection⁽⁸⁾.

It is believed that knowing the perception of health workers about the normalization of deviance is essential to examine and recognize the service deficiencies, as well as to understand the antecedents of AE resulting from pediatric patient care. Due to its hidden nature, the role that normalization of deviance plays in setting the stage for the occurrence of an AE, and the lack of research on the phenomenon in pediatrics, it is imperative to examine this construct in this area.

Given the above, the objective was to know the perception of health workers about the phenomenon of normalization of deviance in a pediatric hospital.

METHOD

Exploratory, descriptive study with a qualitative approach, based on the theoretical-methodological framework of Content Analysis⁽⁹⁾. The exploratory expectations, in this study, address the experiences of workers about the normalization of deviance in their clinical practice.

To describe the data collection and analysis process, the Consolidated Criteria For Reporting Qualitative Research (COREQ) script was used, which includes consolidated criteria for reporting qualitative research, divided into three major domains: 1 – Research team and reflexivity; 2 – Study concept (Theoretical structure, Participant selection and Data collection); and 3 – Analysis and results (Data analysis and Report)⁽¹⁰⁾.

The study setting was a pediatric hospital of the state health network of Ceará, located in Fortaleza, which provides a tertiary level service and is a reference in the care for children and adolescents with serious and highly complex diseases, recognized as a teaching/research institution.

The population included healthcare workers from the Medical, Nursing and Physical Therapy categories, as they are the most directly involved in patient care. They worked in different units of the hospital, such as general pediatrics, neurological hospitalization, cardio-pneumonia hospitalization, intensive care, and surgical center. Convenience sampling was used, approaching professionals available at the research site during the data collection period. The theoretical saturation strategy was considered to close the sample, which was achieved when no more new analytical information emerged and the study provided the maximum amount of information about the phenomenon⁽¹¹⁾.

As inclusion criteria, the following were adopted: being a doctor, nurse, nursing technician or physical therapist; exercising care function in wards, emergency, intensive care, medium-risk unit, or surgical block; and time working in the service of at least one year. Professionals who were on vacation or on leave during the data collection period were excluded.

The study was conducted from August to December 2021. Data were obtained through a sociodemographic/occupational questionnaire and in-depth interview. The questionnaire was closed and included the variables: gender, age, marital status, profession, length of service, time of training, postgraduate degree, work unit, weekly workload, type of employment relationship and number of jobs.

The in-depth interview was chosen as this is recommended for deepening the objectives of a qualitative research. Although there is prior planning with questions in the instrument, the in-depth interview allows other questions to be elaborated from the interviewee's speech⁽¹²⁾. Thus, the interview with the participants was introduced with the guiding question "What do you understand about normalization of deviance in your work environment?", from which the normalization of deviance was addressed by the interviewer (main author). In cases where interviewees had difficulty understanding the term to address the phenomenon, the researcher read the definition of the concept⁽²⁾ for a better understanding of the research topic.

Based on the interviewees' responses, other questions were asked to clarify their reports, such as: "What do you attribute to the normalization of deviance in terms of contributing factors?"; "What factors may be related to this phenomenon in the unit where you work?"; "Do you identify the consequences of these practices for patient care?"; Explain your professional opinion on the subject.

The interviews were previously scheduled with the professionals who agreed to participate in the study. They took place in a place that ensured privacy and at the time that each one judged appropriate, with only the audio being recorded, and the content used only for the purposes of data analysis. The average duration of the interviews was twelve minutes.

Data analysis was performed using the MAXQDA® software, which allows direct transcription of interviews and provides better analysis of results. The data analysis technique used was the Thematic Categorical Content Analysis, in its three stages: 1) Pre-analysis, which aims to systematize the initial ideas to organize the research development; 2) Material

exploration, for systematic analysis of texts to set categories, and 3) Results treatment, inference and interpretation⁽⁸⁾.

After data treatment, three thematic categories emerged, which resulted from the content analysis of the interviews with 21 participants and totaled 128 context units (CU) (paragraphs/periods).

To ensure anonymity, the excerpts from the statements were identified with an initial letter referring to the profession (N – Nurse, P – Physician, PT – Physical therapist, NT- Nursing technician), listed according to the order of participation in the study. In the transcription of the CU, brackets were used to indicate additions that contributed to the understanding of the statements and, for the suppression of part of them and long menus, [...] were used, without changing the meaning.

The study was approved by the Research Ethics Committee of the institution (no. 4924838/2021). All participants signed the Free and Informed Consent Form (FICF), which guaranteed the preservation of their identities, among other relevant information for granting the research. Confidentiality, privacy and data security, used exclusively for research purposes, were also guaranteed.

■ RESULTS AND DISCUSSION

The study included 21 healthcare workers, with a mean age of 38 years. The youngest was 23 years old and the oldest, 60 years old. Of the 21 interviewees, three were male and 18 were female. As for training, 12 were nurses, four physicians, three physical therapists and two nursing technicians. Regarding time of training, the average was 12 years, with the professional who had been working in the profession for the shortest time having graduated one year and the one who had been working for the longest, 36 years of training. Regarding time working in the service, there was an average of eight years. The professional who had been working for the longest time had 19 years in the specialty, and the one who had been working for the shortest time, one year.

Most (19) had an employment through a cooperative, (18) had a postgraduate degree, not specifically in Pediatrics. As for the weekly workload, the average was 54 hours, and nine worked more than 51 hours. It should be noted that this workload refers to the average number of hours worked by these professionals in their different jobs, as most (14) had two or more jobs.

Chart 1 gathers the results of the thematic categorical analysis performed on the 21 interviews with health professionals, which resulted in 128 context units.

CATEGORY n (%)	SUBCATEGORY	DEFINITION	CU/UR n (%)
1. Defining the normalization of deviance 22 (17.2)	-	Addresses the interviewee's understanding of the concept of "normalization of deviance".	22 (17.2)
2. Examples of normalization of deviance in the pediatric hospital 71 (55.5)	2.1 Negligence, violations and recklessness in care practice	Includes examples of normalization of deviance reported by participants, such as cases of bad practices and unethical conduct.	37 (28.9)
	2.2 Confusing deviant practices	Encompasses situations related to patient safety and interpreted by the participants as normalization of deviance. Examples are cases of patient safety incidents, such as near miss, incident without harm and adverse events.	34 (26.6)
3. Contributing factors for the normalization of deviance 35 (27.3)	3.1 Human factors	Brings the perceptions of the participants about conditions and characteristics of the human being that can lead to the normalization of deviance.	21 (16.4)
	3.2 Organizational factors	Encompasses the professionals' understanding of how health organization factors (e.g., work overload and lack of resources) can influence the normalization of deviance.	14 (10.9)

Chart 1 – Thematic categories and subcategories of the analysis of interviews on normalization of deviance in a pediatric hospital. Fortaleza, Ceará, Brazil, 2021 (n=128 UC)
Source: research data, 2022.

It was verified that the analytical units were well distributed in the interviewees' statements, with emphasis on Category 2, which gathered more than half of the CU, contemplating the examples of normalization of deviance in the pediatric hospital.

Category 1. Defining normalization of deviance

This category gathers 22 CU that demonstrate the interviewees' understanding of normalization of deviance. All stated not knowing the term "normalization of deviance" or just assumed the meaning, as evidenced in the statements:

Normalization of deviance, this word is really new! Patient safety I can tell you what I understand, but I can't tell you about normalization of deviance. (P1)

New term, very new, this term is not very used [normalization of deviance] [...] (N3)

No [understanding the term normalization of deviance], it was the first time [I heard it!]. I'm even curious! (N12)

Would [normalization of deviance] be normalizing incorrect attitudes? Is that more or less it? (PT2)

It can be noticed that the interviewees did not know the concept, highlighting that it is something new, especially

in the context of health. Such difficulty in addressing the central concept of this study was clearly observed right at the beginning of the interviews, as the participants were only able to elaborate answers after clarification and definition of the concept by the researcher.

The theme normalization of deviance was, for a long time, linked only to Engineering and Sociology. Only in 1999, with the report *"To Err Is Human: Building a Safer Health System"*, this discussion became an agenda in the health area, when addressing latent errors as possible causes of deviances that later become normalized⁽¹³⁾. Still, the participants expressed their opinions about the phenomenon:

I believe that [normalization of deviance] is something that goes beyond what we recommend, which is patient safety. I believe that deviance would be this escape, but exactly, no [I understand the term!]. (N5)

I understand that normalization of deviance is related to patient safety, it is conduct that deviates from the established standard, that deviate from the protocols, and I see this as a possible cause of harm to the patient's health. (N7)

What I think is the normalization of deviance regarding patient safety. It would become frequent behaviors that do not consider patient safety, hand hygiene, the risk of fall, [...] in short, these are behaviors that have become so common that the person ends up letting it go, that's what I understand by normalization of deviance and ends up becoming frequent. (PT3)

The statements reveal the association between normalization of deviance and patient safety, although it is not a clear concept from the perspective of the participants. It is observed that, from the words "normalization" and "deviance", the interviewees apprehend the meaning of the concept, even without knowing it previously. These perceptions can be explained by a scientific study that defines deviance as a violation of a routine or variation in practice that is not standard and that can result in increased risk for patients. However, due to its chronic nature and that, apparently, does not cause harm, it tends to settle, because it is often intentional⁽⁷⁾.

In line with the statements of the interviewees and with the definition of the concept according to the literature, the normalization of deviance can still be described as inconsistent situations in the field of healthcare and a product of

the desensitization of professionals to risky circumstances and practices, which should be considered unacceptable in healthcare⁽¹⁴⁾.

Over time, shortcuts and deviance from safe practices tend to become a cultural norm among workers, and this unbalances the safety culture in an organization by allowing a gradual tolerance of lower safety standards. Thus, the violation of safety standards is underrecognized for a prolonged period and the normalization of deviance leads to an increase in patient's vulnerability to harm⁽⁴⁾.

Category 2. Examples of normalization of deviance in the pediatric hospital

This category was the most significant in the scope of the analysis. It gathers more than half of the CU and presents examples of deviant situations that are normalized in the routine of the interviewees. The examples were cited after the researcher read the definition normalization of deviance for better clarification, as all participants were not clear on what it was about. However, some reports were not consistent with the phenomenon, but rather with patient safety incidents interpreted as normalization of deviance and which, given its relevance to pediatrics, warrants discussion.

Subcategory 1. Negligence, violations and recklessness in care practice

The participants mentioned several characteristic examples of normalization of deviance in clinical practice. Such examples configure cases of negligence, omission of care, violation of norms, routines, protocols, in addition to recklessness in care practices. They are risky care or not following good practices in health care.

The main example highlighted by the interviewees was negligence regarding hand hygiene practices. It was revealed that, even if professionals performed such action, they failed to do it in at a appropriate time or did not comply with the appropriate techniques, which weakened safe care, mainly regarding the prevention of cross-infection and other types of infections that can be prevented with the brief action of hand hygiene, as can be observed:

When you told me about the term [normalization of deviance], a lot came [to mind] about hand washing, hand hygiene, which is a recommended practice here at the hospital since we entered it, but we see that many people neglect [...] (PT1)

In case, a deviance that I find interesting to reflect on, for example, is hand washing, which is very important for the professional, every professional does it before and after [contact with the patient]. I'm not just talking about nurses, but other professionals too, we see that they don't have this habit. (N6)

The practice of hand washing, hand hygiene, plus hand antisepsis with 70% alcohol, which they sometimes do, but they don't do hand hygiene during breaks (N10)

I must have [hand hygiene] to access the catheter, but since I accessed it without [hand hygiene] and nothing happened, I trivialize this care and then I end up interfering with health care. (P2)

Negligence on the practice of hand hygiene is considered a worldwide problem, as evidenced by a multicenter study developed by the International Nosocomial Infection Control Consortium. This conducted a prospective cohort study with surveillance of healthcare-associated infections related to active devices in 23,700 patients from 33 pediatric intensive care units in 16 countries, from January 2004 to December 2009. The researchers concluded that hand hygiene adherence rates were low, but higher in public hospitals than in university or private hospitals⁽¹⁵⁾.

In a research conducted with family members and guardians of hospitalized children, hand hygiene with soap and water or the use of hand sanitizer was the infection prevention measure most mentioned by the participants. These reported that professionals did not always wash their hands at the recommended times and raised concerns about the frequent use of hand sanitizer at the expense of hand washing in all procedures⁽¹⁶⁾.

In another investigation, although most companions observed the use of gloves at some point during care, few identified the correct hand hygiene by professionals, especially in important moments. For some, hand hygiene, both for professionals and companions, should be a point to be worked on within hospital institutions, as it is an important measure to prevent cross-infection and contamination of patients⁽¹⁷⁾.

It should be mentioned that the present study was conducted at the end of the second wave of the COVID-19 pandemic in Brazil, and even so, hand hygiene was raised as the main deviance.

Other examples of deviant practices included violation of aseptic technique in wound dressings and parenteral nutrition, administration of expired medications, turning off

alarms, negligence in caring for bed rails and in the use of personal protective equipment (PPE), among others:

The dressing change, that is supposed to be sterile, not being done within the technique, is also a deviance [that I observe in my work routine]. (N11)

In the parenteral nutrition facility itself, I see a lot [normalization of deviance], for example, I always use sterile gloves, gauze and syringe, the proper technique, and there is a colleague who says "oh, no, that won't make a difference!" (N12)

Unlike the incubator, it [the heated crib] has a sensor that you must stick on top of the baby's belly, and it makes noise, a lot of noise, if the temperature is not in line with what it is supposed to be, [...] [professionals] turn off this crib to not hear the noise and then the child becomes hypothermic, has bradycardia. (NT1)

[...] one of the [deviant practices] that I emphasize a lot in the unit where I work is about the drugs that are administered to the patient that, even though they have [stability], you open them, and they have that validity. [Certain times], everyone knows that it has expired, but it continues to be administered, even if someone says it or not, so this deviance normalized, because here we have the guidance of staying with the medication until the end, even knowing that it has already expired. (N3)

I have [more examples of deviant practices or negligence], a broken bed, which you often cannot raise the rail, but you do "that little way": "No, I'll just tie it here with a bandage", and it stays, normalizes that deviance and it puts patient safety at risk, and everyone is aware, the entire team. (N4)

[...] another example [of normalization of deviance] [...] is the issue of attire, the use of PPE, mask, cap, there are professionals who have close contact with the patient but neglect the use of basic PPE [...]. (PT1)

In an observational study conducted in an Adult Intensive Care Unit of a Teaching Hospital in 2016, the response time of health professionals to the triggering of sound alarms and the implications for patient safety were measured. Upon hearing the alarm, the researchers activated the stopwatches and recorded the reason, response time, and professional conduct. As a result, it was noted the absence or delay of the team's response to the monitoring alarms in the ICU, which suggests that relevant alarms may have been ignored, thus

compromising patient safety, as the rate of fatigued alarms within of service was concerning. It should be noted that Nursing was the professional category that most responded to alarms, which suggests the desensitization of other professionals to the alarms. More than 60% of the alarms were considered fatigued, and less than 20% were responded within minutes⁽¹⁸⁾.

In the statement of participant NT1, the professionals turn off the alarm of an important vital sign in pediatrics, especially in neonates: the temperature. This compromises the patient's stability and safety, a fact that is similar to the observational research mentioned above, as sound signals often cause discomfort to professionals in intensive care units, for example.

Another situation explained was the failure to properly use sterile gloves, inadequate sequence of aspiration, use of PPE and the aspiration technique in children with tracheostomy, who require greater care from the multiprofessional team, because, in patients with major respiratory diseases, the infection occurs frequently, directly interfering in cases of morbidity and mortality. Still with regard to HAI, lack of hand hygiene, failure in skin antisepsis and failure to apply the correct aseptic technique in sterile procedures contribute to the risk of infections, and increase the length of stay, costs and morbidity and mortality of patients⁽¹⁹⁾.

As well as the statement of participant E4 about the normalization of deviance of not raising the bed rails, researchers also found, in their study, that patients in the 0-6 years age group fell due to this bad practice⁽²⁰⁾. These results show that the nursing team's guidance to companions also play an important role in preventing falls, especially in the case of pediatric patients.

Some professionals revealed that the normalization of deviance also occurs in defense of the patient, in situations that require faster decision-making, such as in interferences or in cases in which workers do not trust the care provided by teammates, and attribute to situations the justification that they are protecting the patient.

Thus, it can be understood that these cases are reckless, because, on several occasions, the professional wants to offer care in a timely manner or create mechanisms and alternatives to remedy the health needs of patients, but what is available is not always standardized or available at the right time, which leads to the use of "alternatives" to what is recommended. This is presented, in the experiences of the participants, as a "necessary evil" for the patient to have their problem solved, which has a great chance by the health team to accept it even if it does not cause immediate harm to the patient. These situations can be observed below:

[Normalization of deviance occurs because] *you want, at that time, to solve the problem, because the patient may decompensate, for example.* (PT3)

Many times, I say "let me do this for you!"; "I'll take care of that little baby for you", not because I want to help her [my coworker], but because I know she won't do it right! (NT1)

[...] *[we use inappropriate wound dressings] with the risk of losing the catheter or contamination. This is unusual, but it is not rare to happen due to lack of material, then you end up evaluating the costs x benefits for the baby and taking a risk, it ends up being a risk that we take for the baby's health!* (N11)

It is observed that adaptation to rule-breaking behavior and "normalization of deviance" are identified by participants as "necessary risks" to patient safety. In previous research, authors described that deviance from safety rules occur, stabilize and become routine if they are not actively managed by health organizations⁽²¹⁾.

It should be clarified that professionals have a distorted view of patient defense, or advocacy for the patient, which is directly related to care, considering the patient's needs or desires. This is an important aspect of current professional nursing care, both for nurses and for patients. The nurse represents the patient's moral agent, so he/she must be ready and able to advocate for the patient's needs⁽²²⁾.

However, in practice, exceeding professional boundaries or not complying with standards and protocols, assuming risks, does not mean defending patients. Differently, it increases the risk of undesirable events such incidents.

In a study, the nursing team showed behaviors that do not comply with the safe medication policy in several situations. Deviance became the norm, although professionals knew it was not the ideal. They failed to check the medication at the bedside to avoid any delay in the medication administration process, which is not expected. Workload, interruptions in medication process, inappropriate layout of the work environment, lack of space to prepare medications do not only affect the safe administration of medications, but also induce nurses to adapt and deviate from safety standards⁽²³⁾.

In another study, an example of deviance was justified for the good of the patient, and represents a procedure that could cause future harm to the patient. A professional who performed venipunctures in the neonatal unit wore gloves for laboratory collections, but always removed the tip of the glove from the index finger, violating one of the infection control rules. However, the professional, when questioned,

stated that she would soon remove the glove, but that she needed sensitivity to avoid multiple punctures⁽⁷⁾.

Subcategory 2. Confusing deviant practices

In this subcategory, the statements of the interviewees involving situations of patient safety incidents, such as “near miss”, incidents without harm and adverse events are presented. These are, therefore, confusing concepts of normalization of deviance, but which deserve to be explored:

It happened once at the hospital, an example like this: the patient went for an exam, the professional prepared all the material, and when she got there, it was another patient, it wasn't him anymore. It happens a lot! (N13)

This [fall] has already happened, I think it was in an exam patient, who needs to be under sedation. The patient arrived, was induced [to anesthesia], everyone was there [next to the child], when the induction ended [anesthetic], there was only the anesthesiologist, when he needed to get another medication, the child fell over and, even in the anesthetic induction, she managed to turn, because the anesthesia resistance varies a lot from one patient to another. (N4)

Dilution of the wrong medication can occur, give a double dose because of weight. (N5)

Pediatric patients have several specificities, such as a less efficient immune system and accelerated metabolism, which results in almost immediate effects of medications. Therefore, it is necessary for the team to pay extra attention to this type of patient. It is also worth mentioning, the identification as a key point in patient safety, with emphasis on pediatrics, since children's inability to communicate can increase the chance of possible AE⁽⁶⁾.

In the care for pediatric patients in hospital stay, it is common to indicate intravenous medications such as sedatives, anesthetics, opioids and antibiotics, which requires continuous surveillance and monitoring to ensure safety in preparation and administration of medication. However, what still exists in practice is that, even with adherence to protocols, some safety barriers in the medication administration process seem to be neglected by professionals, and can cause harm to patients, family members, professionals and the health service⁽²⁴⁾.

In a study, in most of the interviews, it was mentioned that the effective check of the identification wristband was made only at the beginning of the shift. Failures were identified in

their verification in new opportunities, such as when administering medications, performing procedures or exams⁽¹⁷⁾.

Category 3. Contributing factors to the normalization of deviance in practice

This category contemplates what the participants attributed to the causes of normalization of deviance in practice, contemplating 35 CU. For a better understanding of the factors, this category was subdivided into two subcategories: human factors and system factors.

Subcategory 3.1. Human factors

The participants cited factors inherent to human beings, as can be observed in the following reports:

I can [visualize normalization of deviance in my practice] but I believe it is not for bad, I believe it is more for accommodation, because it is more comfortable to deviate, less work for [you to perform your duties] [...]. [For you to have adequate practices] it takes a certain time, there is a certain [demand] for you to develop the habit, you need practice and not everyone is willing to take these habits as a daily practice. (PT1)

In my unit, [...] I have many professionals aged [older], from 50 years old, people with more than 25 years since graduation, so it is very difficult to break paradigms [to avoid deviant practices]. (N12)

I don't know [the exact cause], from what I see, it's because the person really doesn't [care], that [deviant practice] doesn't bother them. (NT1)

There is a lot of stubbornness, let's say, of the group's own behavior and this is not only in nursing, I see physicians, physical therapists, it is a practice of "it has always been like this, we have always done it like this". (N12)

Regarding [neglect of] hand hygiene, I think it's stubbornness [which professionals don't do] I don't know if it's a cultural issue, if it's a matter of team training, I don't know! (N9)

The statements are in line with a study about the factors that contribute to the occurrence of incidents related to drug therapy in intensive care, in which situations that risk patient safety and that are related to the human factor, such as hurry, lack of attention, fatigue, lack of knowledge, distraction, work overload, lack of interest⁽²⁵⁾.

Moreover, it is important to mention that these behaviors of accommodation or violation of recommended practices are characteristics of incivility, a type of destructive behavior in healthcare work that is characterized by low-intensity deviant behavior, which violates work environment norms for respect mutual, and may or may not have the intention of harming the target and transcending the organizational hierarchy⁽²⁶⁾.

Researchers point out that intrapersonal and interpersonal triggers are consistently related to destructive behavior, regardless of professional category (nurses or physicians). Among nurses, organizational triggers were the most evident. These included the pressure of high patient demand, environmental overload, unresolved chronic problems, system issues and the organization/unit culture⁽²⁷⁾.

Subcategory 3.2. Organizational factors

Organizational factors are related to management, work process, availability and quality of human, material and institutional resources. One of the most mentioned is the workload:

I think that, besides the excess of patients, sometimes it gets many patients for few professionals and that people are also working a lot and getting very tired and end up becoming slower, careless and what can happen? A serious error. (N13)

He really [technician] administered [medication] in a different way, as it was not supposed to be, but it was immediately noticed, but it happened [...] there is that whole standard, he studied the appropriate route to where to go, but somehow something that happened there, perhaps due to fatigue, so it went unnoticed and there was no greater cause [harm] for the patient. (N1)

Many times, the work overload that most nursing professionals face [can contribute to the normalization of deviance]. For us to achieve something we must have at least two jobs to be working, to live with dignity, especially the nursing technicians who earn much less and they change shifts, [remaining] little rest time, especially at night. We know that the night was made for rest, [but] as there is a lot of work, they end up spending nights and nights in hospital environment, which impairs the ideal rest that human beings must have. That would really be it, the work overload due to the salary [...], but it doesn't justify what they do, but it is understandable due to the factors as I told you, they are people who have other shifts, they have the household work. (N10)

It can be noted that overwork/overload directly influences safe patient care, because due to high workloads, the

professional may be tired and inattentive, and this leads to attitudes that deviate from what is expected and even determined. Thus, deviances are likely to be insidiously installed and normalized among the professionals responsible for care, since the behavior can be shared among members of a team.

Research has already confirmed this relationship between workload and patient safety⁽²⁸⁾, with a significant association between nurses' daily workload, safety incidents and patient mortality⁽²⁹⁾.

In this subcategory, the lack of material resources was also mentioned as one of the factors that lead to the normalization of deviance, not being something that depends on the professional, but that reflects on the work process and patient safety, as it implies the care offered to the hospitalized child, as shown in the following statements:

In addition to what I already pointed out about the lack of material, because many times, as it is a public hospital, we have an issue of material of poor quality, when I talk about venipuncture, we have had some scalps, for example, bad, because as it is a bidding, we have no way to intervene, and then we do it the way we can. (N12)

As I told you, [normalization of deviance] ends up being a mechanical, routine thing and [is caused] even by the lack of material [to perform procedures] that are necessary. This ends up becoming a routine and [professionals] are not aware of the risks they run for the baby. What can contribute ends up being because the pump equipment is missing to do the other diet, there it is [a diet equipment for more than 24 hours]. (N11)

In public hospitals, especially, the lack of appropriate material [contributes to the normalization of deviance] and then we have to adapt the way we can. (N12)

In the same way, qualitative research conducted in a pediatric hospitalization unit states that the physical structure and quality of materials should be considered resources to perform qualified care, influencing risk minimization, since the professional who does not obtain the necessary devices and logistical support has limited professional attributions, favoring incidents and adverse events⁽³⁰⁾.

This research brings contributions and innovations to teaching, research, management and assistance in nursing and health. Some of them can be listed: the awareness of nurses and other health professionals about how the phenomenon of normalization of deviance is configured, which demands future investigations regarding its conceptual clarity and practical applicability; the possibility of reflections and adaptations in healthcare work processes

aimed at identifying routine and unsafe practices in pediatric units and also in other scenarios; opportunity for managers to develop continuing education activities aimed at consolidating the patient safety culture; and the incorporation of the theme in teaching and research in nursing, which favors the discussion of the problem since graduation, in addition to carrying out studies for the development of protocols and instruments for measuring the phenomenon with quantitative methods.

FINAL CONSIDERATIONS

The participants of this study showed incipient perception about the definition normalization of deviance but managed to list examples after the concept presentation. As examples, stood out cases of negligence, recklessness, violation of protocols, turning off alarms and reckless attitudes in defense of the patient, such as subjecting him to multiple punctures to obtain viable peripheral venous accesses.

Patient safety incidents, near miss and adverse events were confused with normalization of deviance, which suggests the need for professional training focused on the subject and taxonomy of Patient Safety. The factors contributing to the normalization of deviance were also cited, which included human and system factors.

As a limitation, one can mention the little scientific evidence related to the normalization of deviance in health and, particularly, in pediatrics, which hinders further discussions on the theme. Therefore, further studies on the subject in other health care contexts and with other methodological designs are suggested, to clarify the investigated phenomenon in more detail.

REFERENCES

- Alves KYA, Santos VEP, Dantas CN. A análise do conceito segurança do paciente: a visão evolucionária de Rodgers. *Aquichan*. 2015;15(4):521-8. doi: <https://doi.org/10.5294/aqui.2015.15.4.7>
- Price MR, Williams TC. When doing wrong feels so right: normalization of deviance. *J Patient Saf*. 2018;14(1):1-2. doi: <http://doi.org/10.1097/PTS.0000000000000157>
- Reis GAX, Oliveira JLC, Ferreira AMD, Vituri DW, Marcon SS, Matsuda LM. Difficulties to implement patient safety strategies: perspectives of management nurses. *Rev Gaúcha Enferm*. 2019;40(spe):e20180366. doi: <http://doi.org/10.1590/1983-1447.2019.20180366>
- Wright MI. Normalization of deviance. *West J Nurs Res*. 2022;44(2):115. doi: <http://doi.org/10.1177/01939459211030334>
- Everson MG, Wilbanks BA, Boust RR. Exploring production pressure and normalization of deviance and their relationship to poor patient outcomes. *AANA J*. 2020;88(5):365-71.
- Costa JFC, Silva LSG, La Cava AM. Quality and safety in pediatric care. *J Nurs UFPE Online*. 2019;13:e239343. doi: <http://doi.org/10.5205/1981-8963.2019.239343>
- Rocha CM, Gomes GC, Ribeiro JP, Mello MCVA, Oliveira AMN, Maciel JBS. Safe administration of medication in neonatology and pediatrics: nursing care. *J Nurs UFPE Online*. 2018;12(12):3239-46. doi: <http://doi.org/10.5205/1981-8963-v12i12a235858p3239-3246-2018>
- Banja J. The normalization of deviance in healthcare delivery. *Bus Horiz*. 2010;53(2):139. doi: <http://doi.org/10.1016/j.bushor.2009.10.006>
- Bardin L. *Análise de conteúdo*. Lisboa: Edições 70; 2011.
- Souza VRS, Marziale MHP, Silva GTR, Nascimento PL. Translation and validation into Brazilian Portuguese and assessment of the COREQ checklist. *Acta Paul Enferm*. 2021;34:eAPE02631. doi: <http://doi.org/10.37689/acta-ape/2021ao02631>
- Fontanella BJB, Luchesi BM, Saidel MGB, Ricas J, Turato ER, Melo DG. Amostragem em pesquisas qualitativas: proposta de procedimentos para constatar saturação teórica. *Cad Saúde Pública*. 2011;27(2):388-94. doi: <http://doi.org/10.1590/S0102-311X2011000200020>
- Santos KS, Ribeiro MC, Queiroga DEU, Silva IAP, Ferreira SMS. The use of multiple triangulations as a validation strategy in a qualitative study. *Ciênc Saúde Colet*. 2020;25(2):655-64. doi: <http://doi.org/10.1590/1413-81232020252.12302018>
- Institute of Medicine (US) Committee on Quality of Health Care in America; Kohn LT, Corrigan JM, Donaldson MS, editors. *To err is human: building a safer health system*. Washington, DC: National Academies Press; 2000.
- Kubheka B, Naidoo S, Etieyibo E, Moyo K. Silent sufferers: health care practitioners as second victims of patient safety incidents. *Health Edu Care* 2019;4:1-4. doi: <http://doi.org/10.15761/HEC.1000167>
- Rosenthal VD, Jarvis WR, Jamulitrat S, Silva CPR, Ramachandran B, Dueñas L, et al. Socioeconomic impact on device-associated infections in pediatric intensive care units of 16 limited-resource countries: international Nosocomial Infection Control Consortium findings. *Pediatr Crit Care Med*. 2012;13(4):399-406. doi: <https://doi.org/10.1097/PCC.0b013e318238b260>
- Peres MA, Wegner W, Cantarelli-Kantorski KJ, Gerhardt LM, Magalhães AMM. Perception of family members and caregivers regarding patient safety in pediatric inpatient units. *Rev Gaúcha Enferm*. 2018;39:e2017-0195. doi: <http://doi.org/10.1590/1983-1447.2018.2017-0195>
- Hoffmann LM, Wegner W, Biasibetti C, Peres MA, Gerhardt LM, Breigeiron MK. Patient safety incidents identified by the caregivers of hospitalized children. *Rev Bras Enferm*. 2019;72(3):707-14. doi: <http://doi.org/10.1590/0034-7167-2018-0484>
- Oliveira AEC, Machado AB, Santos ED, Almeida EB. Alarm fatigue and the implications for patient safety. *Rev Bras Enferm*. 2018;71(6):3035-40. doi: <http://doi.org/10.1590/0034-7167-2017-0481>
- Ribas MA, Almeida PHRF, Chaves GA, Lemos GS. Eventos adversos e queixas técnicas notificados a um núcleo de segurança do paciente. *Rev Aten Saúde*. 2019;17(62):71-80. doi: <http://doi.org/10.13037/ras.vol17n62.6184>
- Kisacik OG, Cigerci Y. Use of the surgical safety checklist in the operating room: operating room nurses' perspectives. *Pak J Med Sci*. 2019;35(3):614-9. doi: <http://doi.org/10.12669/pjms.35.3.29>
- Amalberti R, Rocha R, Vilela RAG, Almeida IM. Safety management in complex and dangerous systems – theories and practices: an interview with René Amalberti. *Rev Bras Saúde Ocup*. 2018;43:e9. doi: <http://doi.org/10.1590/2317-6369000021118>
- Vitale E, Germini F, Massaro M, Fortunato RS. How patients and nurses defined advocacy in nursing? a review of the literature. *JHMN*. 2019;63:64-9. doi: <http://doi.org/10.7176/JHMN/63-08>
- Alomari A, Wilson V, Solman A, Bajorek B, Tinsley P. Pediatric nurses perceptions of medication safety and medication error: a mixed methods study. *Compr Child Adolesc Nurs*. 2018;41(2):94-110. doi: <http://doi.org/10.1080/24694193.2017.1323977>

24. Vória JO, Padula BLD, Abreu MNS, Correa AR, Rocha PK, Manzo BF. Compliance to safety barriers in the medication administration process in pediatrics. *Texto Contexto Enferm.* 2020;29:e20180358. doi: <http://doi.org/10.1590/1980-265X-TCE-2018-0358>
25. Arboit EL, Camponogara S, Urbanetto JS, Beck CLC, Silva LAA. Factors contributing to the incident occurrence of security related to drug use in intensive care. *R Pesq Cuid Fundam.* 2020;12:1030-6. doi: <http://doi.org/0.9789/2175-5361.rpcfo.v12.7456>
26. Oliveira RM, Silva LMS, Guedes MVC, Oliveira ACS, Sánchez RG, Torres RAM. Analyzing the concept of disruptive behavior in healthcare work: an integrative review. *Rev Esc Enferm USP.* 2016;50(4):690-9. doi: <http://doi.org/10.1590/S0080-623420160000500021>
27. Bae SH, Dang D, Karlowicz KA, Kim MT. Triggers contributing to health care clinicians' disruptive behaviors. *J Patient Saf.* 202;16(3):e148-e155. doi: <http://doi.org/10.1097/PTS.0000000000000288>
28. Sturm H, Rieger MA, Martus P, Ueding E, Wagner A, Holderried M, et al. Do perceived working conditions and patient safety culture correlate with objective workload and patient outcomes: a cross-sectional explorative study from a German university hospital. *PLoS One* 2019;14(1):e0209487. doi: <http://doi.org/10.1371/journal.pone.0209487>
29. Al Ma'mari Q, Sharour LA, Al Omari O. Fatigue, burnout, work environment, workload and perceived patient safety culture among critical care nurses. *Br J Nurs.* 2020;29(1):28-34. doi: <http://doi.org/10.12968/bjon.2020.29.1.28>
30. Biasibetti C, Rodrigues FA, Hoffmann LM, Vieira LB, Gerhardt LM, Wegner W. Patient safety in pediatrics: perceptions of the multi-professional team. *Rev Min Enferm.* 2020;24:e1337. doi: <http://doi.org/10.5935/1415.2762.20200074>

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