Patient safety: understanding human error in intensive nursing care*

Segurança do paciente: compreendendo o erro humano na assistência de enfermagem em terapia intensiva

Seguridad del paciente: comprendiendo el error humano en la asistencia de enfermería en cuidados intensivos

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ABSTRACT

Objective: To analyze the active failures and the latent conditions related to errors in intensive nursing care and to discuss the reactive and proactive measures mentioned by the nursing team. **Method:** Qualitative, descriptive, exploratory study conducted at the Intensive Care Unit of a general hospital. Data were collected through interviews, participant observation and submitted to lexical analysis in the ALCESTE® software and to ethnographic analysis. **Results:** 36 professionals of the nursing team participated in the study. The analysis originated three lexical classes: Error in intensive care nursing; Active failures and latent conditions related to errors in the intensive care nursing team; Reactive and proactive measures adopted by the nursing team regarding errors in intensive care. **Conclusion:** Reactive and proactive measures influenced the safety culture, in particular, the recognition of errors by professionals, contributing to their prevention, safety and quality care.

DESCRIPTORS

Patient Safety; Medical Errors; Critical Care Nursing; Intensive Care Units; Nursing Care.

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INTRODUCTION

Patient safety is a fundamental principle of health care. In recent years, there has been a significant increase in discussions on care-associated injuries. Currently, medical errors are the third leading cause of death in the United States. In the United Kingdom, it is estimated that one accident causing harm occurs every 35 seconds[1].

The publication of the report "To Err is Human: Building a Safer Health Care System" alerted society to the occurrence of adverse events in hospital institutions, estimating that between 44,000 and 98,000 Americans die each year in hospitals as a result of medical errors. However, almost two decades after this publication and despite the adoption of several recommended strategies, the number of adverse events did not decrease as expected[2].

Errors can cause serious damage to healthcare users and qualitatively and quantitatively affect the institutions. For the professionals, error is often related to feelings of shame, guilt and fear of punishment, given the existing punitive culture that is directed to omissions and misses out on the opportunity to understand and adequately manage error.

In this study, James Reason's Human Error Theory, also known as the "Swiss Cheese Model", was used as theoretical framework. This theory provides a proper understanding and conduct towards these errors. It does not blame only the professional and emphasizes the need for a complete analysis of the entire organizational system[3].

According to this theory, error is classified as: "error of execution - unintentional use of a wrong plan to achieve an aim" and "error of planning – failure of a planned action to be completed as intended". Errors indicate the potential existence of adverse events, understood as incidents that harm patients, and which, if not adequately managed, can realize their potential. Active failures in defense systems are related to errors committed by people, and latent conditions are related to the organizational system[4-5].

From a managerial perspective, it is important to understand that errors occur mainly because of problems in the organizational system, and not only because professionals make mistakes. It is fundamental to identify the weaknesses in the process and adopt preventive measures, since recognizing the real dimension of the problems will be a unique opportunity to improve patient safety[4,6].

In this context, the Human Error Theory proposes the management of error through reactive and proactive measures aimed at improving organizational processes. The reactive measures are those adopted after the occurrence of the error, and the proactive measures are those that are aimed at preventing and avoiding future occurrences, emphasizing the organizational safety culture[6].

Regarding intensive care nursing, it is up to the team to "define and monitor indicators of prevention or reduction of adverse events pertinent to the unit, as well as to collect, analyze, establish corrective actions, report adverse events and technical complaints to the risk management sector or to another sector, according to the institutional norms"[7].

Institutions must stimulate professionals to notify errors and adverse events, increasing the awareness of occurrences. However, due to the punitive culture, the occurrences are, in most cases, underreported, which hinders the knowledge of their extent and the adoption of proactive measures[8].

Understanding the occurrence of errors may encourage the professional to properly report it, which will help changing the current underreporting scenario. It is important to invest in organizational safety culture, disseminating the concept of patient safety and promoting non-punitive discussions about human error.

Thus, the objectives of this article are: to analyze the active failures and the latent conditions related to errors in intensive nursing care and to discuss the reactive and proactive measures stated by the nursing team.

METHOD

TYPE OF STUDY

Qualitative, descriptive and exploratory study. Based on the Human Error Theory, the method of "Questionnaire Studies"[4] was used. It consisted in the analysis of the participant's answers regarding the types of errors, and their observation when exposed to stressful situations, such as nursing professionals in intensive care.

SCENARIO

"The study setting was the Intensive Care Unit (ICU) of a general federal public hospital member of the Brazilian Network of Sentinel Hospitals of the Brazilian Health Surveillance Agency (ANVISA – *Agência Nacional de Vigilância Sanitária*)"[9]. The ICU has 22 beds, divided into three sectors: ICU 1 (10 beds), ICU 2 (9 beds), and Annex (4 beds). The same multi-professional team works in all sectors according to a monthly scale.

The nursing team consisted of 83 professionals. The inclusion criteria were: being a permanent employee/public servant, "being allocated at the ICU, and working in the sector for more than 6 months. The exclusion criteria were: being on leave from the ICC during the data collection period due to holidays and other leaves"[9].

DATA COLLECTION

After applying the described criteria, 63 professionals (22 nurses and 41 nursing assistants were selected). However, 36 professionals, 13 nurses and 23 nursing assistants who worked in the day and night shifts participated in the study. It is worth noting that 06 (six) professionals refused to participate, reporting they felt discomfort regarding the discussions about human error and eventual occurrences in the ICU. The other 21 professionals were not available due to the multiple work activities and shift changes[8].

The profile of the participants was characterized based on the variables gender, professional category, age, training time and time working in the ICU. Data were collected between July and September of 2013, using individual interviews[8] and participant observation. The semi-structured interview

script presented questions about the understanding and professional positioning regarding errors in care, as well as the causal and preventive factors related to error. "The interviews were recorded in MP4 and later transcribed"[9].

The participant observation script guided the activity by topics including the adequacy of the scenario to safety, the interrelation between the participants and the identification of situations that can lead to error. A total of 130 hours of observations were recorded in field diaries.

DATA ANALYSIS AND TREATMENT

"The data were submitted to lexical analysis, using the software *Analyse Lexicale par Contexte d'un Ensemble de Segments de Texte* – ALCESTE®. The observation data were submitted to ethnographic analysis and the results were presented along with the results produced in ALCESTE"[9].

For this analysis, a *corpus* was prepared and produced "three lexical classes, named according to the analysis of the senses and meanings of the corresponding words and the most significant Elementary Context Units (ECUs), namely: Error in intensive care nursing (class 3)"[9]; Active failures and latent conditions related to errors of the intensive care nursing team (class 2); Reactive and proactive measures adopted by the nursing team regarding errors in intensive care (class 1).

ETHICAL ASPECTS

The study was approved by the Research Ethics Committees of the proposing and co-participating institutions, according to protocol no. 229,926 of March 26th, 2013 and no. 292,974 of June 10th, 2013. "The study respected all aspects of Resolution 466/12 of National Health Council"[9].

RESULTS

Of the 36 participants, 64% were nursing assistants and 36% were nurses. The female gender predominated (81%) and the age ranged from 30 to 59 years. Regarding professional training, 40% had less than 10 years of training and 73% had 4 to 10 years in the ICU. All the nursing assistants who participated had technical training in nursing, however, they were hired by the Ministry of Health as nursing assistants through a public call test.

"The *corpus* analyzed obtained 74% of use, with 4,466 distinct analyzable forms or words, 1,181 ECUs selected, of which 73% were classified in three classes, divided in two thematic blocks. The first thematic block only produced class 3 and represented 34% of the total corpus, consisting of 161 analyzable words and 292 ECUs"[9]. The second thematic block gave rise to classes 1 and 2, class 1 represented 37% of the *corpus*, which was constituted by 124 analyzing words and 324 ECUs, and class 2 represented 29%, with 129 analyzing words and 251 ECUs.

ERROR IN INTENSIVE CARE NURSING

The identification of errors in nursing care in the ICU was associated with the variables female gender and age between 20 and 30 years. "Medication errors were illustrated by the words: medication (Khi2 101), patient (Khi2 75), put

(Khi2 45) and change (Khi2 42)"[9], which referred to errors in the preparation and administration of medications.

We have a system in which we put the serum to dilute all the medications. We take the serum with the syringe and needle and dilute all the medications, which ends up contaminating it (UCE 1065).

One time the patient had a fever and I administered dipyrone, and I did not communicate it to the team, so it is not checked, and it may be done again. Sometimes the physician asks for something, as it happened in bed two and it was not an emergency, it was a tube exchange, and that's between us. He asks for dipyrone, and we do not write it in the record and in the prescription (UCE 158)[9].

Inappropriate use of infusion pumps was also reported.

Sometimes you do not know how to handle the pump or you don't pay attention. It has happened, like with 'dormonid', which has to last until the next morning, then you look 2 hours later and everything has gone in, and then the patient is hypotensive and all decompensated (UCE 283)[9].

"The alarm of an infusion pump went off for 15 minutes without anyone checking what was happening. Then, I turned off the alarm and saw that the saline solution with electrolytes being infused was over. I communicated the team, who installed a new solution after my request" (Excerpt from the field diary)[9].

Prescription alterations and errors were also cited:

With medication, a mistake I often see is not the exchange of medication, it is usually between the prescription and what is on the pump, the medication that is being administered, but is not prescribed and medication that is prescribed and is not administered (UCE 805)[9].

"Not raising the bed rails was mentioned and related to the risk of falling from the bed. This problem was identified through the words bed (Khi2 41) and rail (Khi2 26)"[9].

Sometimes you go to the bed and you really leave the rail down (UCE 24)[9].

"When I observed the bed bath performed by a nursing technician, I saw that he left the bed four times to pick up material, and the patient, who was with an orotracheal tube, sedated and on a zero degree position, was left exposed and with all rails lowered" (Excerpt from the field diary)[9].

"Not raising the rails was also related to the quality of the furniture used at the ICU, given the difficulty to lock the bed rails"[9]:

The rail that goes down is close and if you do not put it right, it will go down. So you may not lock it right and then it will go down. There are other problems with the bed, the wires too, because it is attached to the mattress, and when you lower it, if you don't observe everything around it, you may pull out a probe, so besides the bed being bad, the rail is also not good (UCE 132-133)[9].

"Unplanned accidental extubations were related to the radiographic examinations in the bed and associated with the word: x-ray (Khi2 36)"[9].

And you go look and the patient looks fine, he's on ventilation,

but it's out of place, because sometimes, for example, the x-ray has gone by, it was retracted and you looked from far away and thought that everything was fine, but when you go and look closer... (UCE 804)[9].

ACTIVE FAILURES AND LATENT CONDITIONS RELATED TO ERRORS IN THE INTENSIVE CARE NURSING TEAM

This class was not associated with any specific variable, and the words highlighted were: training (Khi2 50), service (Khi2 45), education (Khi2 43) and permanent (Khi2 37), which may be associated with the need for education and in-service training.

I have always worked in the ICU, I have spent most of my life in the ICU, and we see that the ICU is a sector that requires training, then it gets an employee who has no skill and he hears that it's all easy (UCE 1147).

"Occurrences such as inadequate use of bonnets, gloves and masks, failure to elevate bed rails and inadequate performance of techniques could be corrected with in-service training and capacity building strategies. The professionals of the nursing team complained about the lack of training regarding new technologies, which contributes to the lack of commitment of the team" (Excerpt from field diary).

At this meeting we had now with the boss, he even said that, in partnership with the Study Center, he will train this staff that has arrived. Some of them worked someday shifts, but it's no use because the daytime routine is also full of service and we don't have time to teach then, and at night we have even less time (UCE 974).

The deficient professional training and the hiring of professionals without experience and training were related to the occurrence of errors:

I think that when you hire for intensive therapy, you got to see. In public service, they hire without a proper research, without a more thorough look. So, in the end, people came in totally unprepared, some even wanted to learn, but had never worked in this area (UCE 735).

Work overload and low staffing were associated with the words load (Khi2 26), shift (Khi2 26) and employees (Khi2 20).

Nursing is very overloaded, not only in this sector, but also many times they come from other shifts, and there is a need to seek a better quality of life working two, three jobs (UCE 208).

"When I arrived in the sector, I found the nursing, the routine and the management staff stressed and discouraged, complaining about the working conditions in the ICU and the deficit in the number of professionals" (Excerpt from the field diary).

Overload and working multiple jobs generate fatigue, lack of attention and commitment and professional dissatisfaction, highlighted by the word "tired" (Khi2 17).

I think the person is tired because they come from another shift, because the workload is bad, because the person has to have two jobs and sometimes, he/she is working for 24 or 36 hours and this all hinders the development of work (UCE 123).

Dissatisfaction with the material resources and the lack of maintenance was mentioned, highlighting problems with the transportation monitor of the sector:

"I immediately took the monitor and told them to get it away from here, so they disappeared with it. I called the responsible technician and I told him that I had asked him to come see it and he did not, so I told him that I did not want it here, and if I had a test, I would not go down because of him (...) Because it's been months we asked them to see this monitor and something like that had to happen for us to get a more drastic solution, to take the monitor and fix it, and he brought another one on the same day (UCE 516-517)"[9].

REACTIVE AND PROACTIVE MEASURES ADOPTED BY THE NURSING TEAM REGARDING ERRORS IN INTENSIVE CARE

The main variables associated with this class were the male gender and working in the ICU for more than 11 years. The analytical words referred to the positioning of the nursing team in the face of errors in the ICU, and the highlighted words were err (Khi2 65), try (Khi2 55), speak (Khi2 25), talks (Khi2 24), think (Khi2 20), am (Khi2 21) and solve (Khi2 16). The need for effective communication between professionals was evidenced, since it may interfere with the occurrence and prevention of error.

I try to avoid it. I usually speak like this: Guys, I'm going to administer medication to the patient. You see, because if I make a mistake, everyone is wrong together. It's a joke, but sometimes other points of view can help more. Every human being is liable to error, but the error in nursing is very complicated because we deal with lives, so they are often irreparable errors, that's the difference (UCE 1139).

The participants related the leadership and supervision activities carried out by the nurse to the prevention and occurrence of errors in the ICU.

Leadership is also exercised in a natural way, so I try to reduce as much as possible the number of mistakes in the team and I work as well as possible within the technique (UCE 335).

Underreporting of errors was related to fear of criticism and difficulties with interpersonal relations in the work environment, manifested in the word team (Khi2 31).

The staff likes to criticize, to point out fingers. When everyone is together, there is a bit of criticism. When you try to ask before, I think they even try to help you, explain it to you, but if you make a mistake, they talk about your mistake (UCE 990).

And there is not much discussion, we just talk normally. And it depends on where the error originated. Some speak, and some try to not give away easily. We see it, but the person does not admit (UCE 59).

"The nurse on call complained about the great amount of medical errors and that these are silenced by the team, unlike the errors involving the nursing team, which are treated in a critical and negative way" (Excerpt from the field diary).

The need to discuss the occurrence of the error in the ICU was identified through the words conversation (Khi2 24), situation (Khi2 18) and solve (Khi2 16).

No, there is no conversation, not about improvement, nor about errors. There was no conversation about improvement, only in closed groups, like, I sit down with another colleague and talk about what we found interesting, but everybody together, no (UCE 589).

When they identify the error, the professionals initially try to solve the problem, causing the "least possible damage" to the patient, highlighting the importance of understanding the error, avoiding new occurrences and solving the problem.

I think the mistake is inevitable. The professionals can deal with it, most of them in a positive way. First, we try to minimize the effects of this error, then we sit down with who made it to try to understand the reason for the error and prevent it from happening again (UCE 2).

DISCUSSION

The analysis of the variables related to the participants showed a heterogeneous group, which may interfere in the learning and training processes, since older professionals learn differently from the newly graduated[10]. In the group studied, 60% of the interviewees had more than 10 years of training, which can result in learning conflicts and less effective development.

It is important to encourage the integration of the group to promote proper teamwork, encourage effort and offer an environment conducive to personal relationships, which may contribute to patient safety.

Error in intensive care nursing

The errors identified came from the judgment of the professionals interviewed. It is worth noting that, rather than pointing out the error, it is necessary to understand it and allow the professional to make a judgment about his actions.

In the Human Error Theory, error is associated with two approaches: the person and the system approach, related to different philosophies of error management. The errors identified were related to the system approach, which considers that humans are fallible and errors are to be expected in all organizations and are associated with systemic factors[4].

Errors are classified according to the cognitive stage of occurrence and the action involved. They may be related to planning (mistakes), storage (lapses) and execution (slips)[4]. Planning errors were related to the decision-making process or planning of the action, such as errors in the preparation of medications. Storage and execution errors were exemplified by not raising bed rails and improper handling of equipment.

Cognitive stages interrelate, and, depending on the situation, errors can be associated with more than one stage. For example, a medication error can occur because it was prepared in the wrong way due to incorrect planning of the action (mistake), improperly stored in the sector (lapse) and administered outside of the prescribed time, in the wrong patient, wrong route or wrong technique (slip).

The medication process involves several steps from prescription until drug administration. Nursing acts in the stages of preparation and administration of medication, and must meet the nine rights, which include: "right patient,

right medication, right route, right dose, right time, right documentation, knowledge of the action, pharmaceutical presentation and monitor the effect"[11]. "In addition, it is essential to clarify doubts and identify the drug with the patient's name, bed, name of the medication, route of administration, drip and time of infusion"[12].

These steps are related to the basic principles of nursing and institutional norms and routines, and not following them may interfere with patient safety. A study that analyzed 339 medication errors identified that 291 errors were directly related to the workforce, that is, to the professionals performing the action. Of these, 43.4% were related to the right medication, 27.4% to the right documentation, 12.1% to the right patient, 11.2% to the right time, 3.2% to the right route, and 2.7% to the right dose[13].

Falls are another common occurrence in hospitals, responsible for two out of every five adverse events. "Injuries deriving from the falls occur in between 15% and 50% of the events, resulting in a wide range of damage, such as post-fall syndrome, increased morbidity, recovery problems and increased hospitalization"[9,14]. "Harms resulting from falls are also related to the length of hospital stay and the increase in the costs of care"[9,15].

Unplanned/accidental extubations were related to radiographic examinations in bed and other procedures. It was observed that no professional of the nursing team accompanied the procedure in order to help and avoid possible occurrences, due to their overload of work.

Accidental extubation has a less effective risk management compared to other events, and is a frequent concern in intensive care. It may be related to clinical factors such as patient agitation, inadequate fixation of ventilation device and lack of sedation, or to systemic factors such as professional inexperience, insufficient staffing, among others[16].

To prevent the situations described and modify the reality, it is fundamental to engage the multi-professional team and managers, investing in a clear and effective communication to identify occurrences. This way, it will be possible to find effective barriers, defenses and safeguards, since the fragilities of the system will be known.

Active failures and latent conditions related to errors of the intensive care nursing team

Failures in the barriers and safeguards of organizational defense systems have the function of protecting victims from risk situations. Weaknesses in the system will always exist and may occur due to active failures and latent conditions[6].

Active failures are committed by people who are at the endpoint of the system, and can be exemplified by misidentification of patients, failure to check medical and nursing prescriptions, inadequate use of alarms and aseptic techniques, administration of suspended medications, and misidentification of medications.

The latent conditions are originated in organizational decision-making, and may lie dormant for years before they are combined with active failures and cause accidents. Both active failures and latent conditions are not easily predicted, however, awareness about them will lead to the adoption of proactive management[6].

Among the latent conditions identified, the lack of professional qualification programs was highlighted, which is fundamental for the professionals that work in intensive care. Training leads to the mastery of technical-scientific knowledge and contributes to establishing a link between theory and practice in the work environment, expanding the possibilities of intervention and the use of technological resources and ensuring safety for both the professional and the patient[17].

Complex situations that demand decisions in the ICU require professionals prepared to face ethical and technical problems. As for nurses, it is their responsibility to prevent, detect and act immediately and effectively on complications, which may not happen if they are not properly trained[18].

The nursing team must engage in the training process through continuous learning, improving their skills and providing quality service. For this, it is up to the managers to stimulate creativity, efficiency and learning, individually and in groups, satisfying the needs of the team and promoting among their employees the notion of being a "learning organization"[19].

Overload related to long work shifts impairs safety foundations. In the United States, more than half of nurses work less than 40 hours per week, which is associated with excellent patient safety outcomes[20].

In situations where these professionals work more than 60 hours a week, which may be associated with other employment relationships, there is a deficiency of functional staff, forcing workers to act in a "crisis mode", trying to do too much too quickly and without the necessary attention. This overload leads to stress and fatigue, factors that compromise performance and may result in errors, lack of communication and mutual help, interpersonal problems and loss of respect and understanding[20].

It is practically impossible to eliminate active failures and latent conditions, since the system is not closed. For this reason, it is essential to invest in specific and continuous security measures, called reactive and proactive measures[6].

REACTIVE AND PROACTIVE MEASURES ADOPTED BY THE NURSING TEAM REGARDING ERRORS IN INTENSIVE CARE

Effective safety management consists of knowing what is manageable or not. Instead of exercising control over accidents, the organizational processes must be improved, which can be done through reactive measures – collecting information and tracking occurrences – and proactive measures – adopted before the occurrence based on a situational diagnosis – in a way that both measures interrelate[6].

Among the reactive measures identified were the interviewees' recognition that errors occur in daily care, error neglect due to punitive culture, fear of criticism, feelings of shame, guilt and frustration and the attempts made by the professionals to undo the possible damages.

Proactive measures were associated with organizational factors, prioritizing the correction of failures at a higher organizational level, which helps to reverse unsafe individual acts and locational factors. These measures were the need to strengthen leadership in the nursing team, the need for investment and for respect for the professional hierarchy in the ICU and the importance of investing in effective communication between the multi-professional team.

Organizational processes can be improved through supervision and team leadership activities. A leadership based on reactive and proactive measures can influence the motivational aspect, making the individuals upraise their particularities through confidence in the decision making process[4].

In the managerial aspect, "the personal influence of the leader in the creation of environments with high-quality professional practice showed a direct and positive relationship, in which leadership has a singular impact on the work environment, fundamental in environments such as the ICU, which has a heterogeneous group predisposed to conflictual situations"[12].

Conceptually, "the leader has no delegated authority; he obtains power by influence, with emphasis on interpersonal relationships, and directs cooperative followers toward goals. Nursing leadership has been related to variables such as patient satisfaction, work satisfaction, commitment and organizational climate, professional productivity, responsibility, empathy, ability to make decisions, communication and effective management"[21].

Error neglect and omission are related to the leadership style and difficulties in relationships and communication in the workplace, which interfere on the surfacing of errors and on the opportunity to understand and manage error.

The traditional approach to health care error not only takes the focus away from health systems, but also discourages individuals from reporting error, as they may face a series of penalties. It also blames the professional who made the mistake, not evaluating the systemic factors that contributed to the event[2].

In the system approach, the basic premise is that human beings are fallible and errors are expected even in the best organizations. Errors are seen as consequences rather than causes, having their origin not in the "perversity of human nature", but in existing systemic factors[22].

In order to encourage reporting of errors, voluntary and anonymous reporting instruments are recommended. This measure does not capture the totality of errors, but it allows to know a little more about these episodes and other situations of risk.

A study on error reporting aimed at understanding the motivation of the nursing team to adequately notify adverse events highlighted that, when professionals understand the World Health Organization's definitions of adverse event, incident and harmless incident, they are motivated to fill in the notification tools[23]. The interviewees emphasized that conversations, meetings and trainings with the team enable the understanding and resolution of situations of error. However, it is essential that these discussions have a positive approach and stimulate safety culture.

The safety culture is a necessary practice that should be based on the idea that human beings make mistakes, and the key to their prevention consists in structuring the systems in order to minimize the opportunities for them to happen, that is, to stimulate the creation of barriers and safeguards to avoid system failures[4].

CONCLUSION

This study allowed understanding the occurrence of errors in care by identifying the active failures and latent conditions. The active failures were the mistakes made by professionals, such as not checking prescriptions, and latent conditions were related to managerial decisions, such as lack of professional training. Active failures originate from latent conditions, and when both occurs, error occurs.

It is essential to invest in reactive and proactive measures. Among the reactive measures, the importance of the recognition of the error by professionals was highlighted, since it can be considered the basis for understanding and preventing error and it can contribute to the adoption of proactive measures, such as investment in professional training and effective communication.

The adoption of these measures is directly related to the organizational safety culture, which allows professionals to feel comfortable discussing human error and to take effective measures to promote safe and quality care.

We highlight the difficulty to hold the interviews, related to the work overload and the reduced number of professionals in the scenario studied.

RESUMO

Objetivo: Analisar as falhas ativas e as condições latentes relacionadas aos erros na assistência de enfermagem em terapia intensiva e discutir as medidas reativas e proativas referidas pela equipe de enfermagem. **Método:** Estudo qualitativo, descritivo, exploratório. realizado no Centro de Terapia Intensiva de um hospital geral. Os dados foram coletados por meio de entrevistas e observação participante e submetidos à análise lexical pelo *software* ALCESTE® e à análise etnográfica. **Resultados:** Participaram 36 componentes da equipe de enfermagem. O *corpus* analisado originou três classes lexicais: O erro na assistência de enfermagem em terapia intensiva; Falhas ativas e condições latentes relacionadas ao erro da equipe de enfermagem na terapia intensiva; Medidas reativas e proativas adotadas pela equipe de enfermagem frente ao erro na terapia intensiva. **Conclusão:** As medidas reativas e proativas influenciaram a cultura de segurança, em especial, o reconhecimento do erro pelos profissionais, contribuindo para a sua prevenção e uma assistência segura e de qualidade.

DESCRITORES

Segurança do Paciente; Erros Médicos; Enfermagem de Cuidados Críticos; Unidades de Terapia Intensiva; Cuidados de Enfermagem.

RESUMEN

Objetivo: Analizar las fallas activas y las condiciones latentes relacionadas con los errores en la asistencia enfermera en cuidados intensivos y discutir las medidas reactivas y proactivas referidas por el equipo de enfermería. **Método:** Estudio cualitativo, exploratorio, llevado a cabo en el Centro de Cuidados Intensivos de un hospital general. Se recogieron los datos mediante entrevistas y observación participativa. Dichos datos fueron sometidos al análisis lexical por el software ALCESTE® y al análisis etnográfico. **Resultados:** Participaron 36 componentes del equipo de enfermería. El *corpus* analizado originó tres clases lexicales: El error en la asistencia enfermera en cuidados intensivos; Fallas activas y condiciones latentes relacionadas con el error del equipo enfermero en cuidados intensivos; medidas reactivas y proactivas adoptadas por el equipo de enfermería ante el error en los cuidados intensivos. **Conclusión:** Las medidas reactivas y proactivas influenciaron la cultura de seguridad, en especial, el reconocimiento del error por los profesionales, contribuyendo a su prevención y a una asistencia segura y de calidad.

DESCRIPTORES

Seguridad del Paciente; Errores Médicos; Enfermería de Cuidados Críticos; Unidades de Cuidados Intensivos; Atención de Enfermería.

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