ABSTRACT

Objective: to analyze the perception of the nursing team of the emergency unit on risk management and adherence to the system of reporting adverse events. Method: descriptive and exploratory study with a qualitative approach, with 34 nursing technicians. The data were constructed from interviews with a semi-structured guide, audio-recorded, transcribed verbatim and analyzed by the Content Analysis technique. The project was approved by the Ethics in Research Committee, CAAE 02054212.7.0000.5098. Results: the analyses revealed that 97% of respondents considered that patients are exposed to adverse events especially in emergency units; the majority affirmed that was touched on the theme; 35% reported having used the system of event notification. Conclusion: the majority of respondents correctly identified the adverse events, however, the adherence to the electronic system of event notification was still unsatisfactory, which led to underreporting. Descriptors: Safety Management; Emergency Nursing; Iatrogenic Disease; Nursing Team.

RESUMO

Objetivo: analisar a percepção da equipe de enfermagem da unidade de emergência sobre o gerenciamento de risco e adesão ao sistema de notificação de eventos adversos. Método: estudo descritivo, exploratório, com abordagem qualitativa, com 34 técnicos de enfermagem. Os dados foram construídos a partir de entrevistas com roteiro semiestruturado, gravadas em áudio, transcritas na íntegra e analisadas pela Técnica de Análise de conteúdo. O projeto foi aprovado pelo Comitê de Ética em Pesquisa, CAAE 02054212.7.0000.5098. Resultados: as análises revelaram que 97% dos entrevistados consideraram que pacientes estão expostos a eventos adversos principalmente nas unidades de emergência; a maioria afirmou que foi sensibilizada sobre tema; 35% referiram terem utilizado o sistema de notificação de eventos. Conclusão: a maioria dos entrevistados identificou corretamente os eventos adversos, porém a adesão ao sistema eletrônico de notificação de eventos ainda foi insatisfatória, o que gerou subnotificação. Descriptors: Gerenciamento de Segurança; Enfermagem em Emergência; Doença Iatrogênica; Equipe de Enfermagem.
INTRODUCTION

Risk management is one of the most discussed topics in the hospital escape in recent years, which linked to the processes of continuous improvement has contributed to quality and service excellence in the services provided. The nurse has an important role in this scenario, since management activities related to nursing are its responsibility, as well as training and permanent education processes.1,2

The care should be practiced with quality, risk and flaw-free, committed to customer safety, promoting health without causing damage. According to some authors, incidents, adverse events, or iatrogeny or assistance errors are undesirable occurrences, harmful and damaging that compromise patient safety. In addition to physical and emotional damage, an increase in the length of hospitalization, suffering from the client, temporary or permanent disability and even death can also occur. The consequences are not limited to the patient, and can even reach its family.1,3

Despite prevention mechanisms, the first measure to be adopted must be to admit that the error can happen, understanding and looking for its solution. One should remember that the error is characteristic of “human beings” and occurs independent of personal will, professional ability and attention given to the procedure, given that other factors such as the environment, the psychological and physiological contribute to its occurrence.5

Thus, the notification of adverse events allows actions to be implemented, given the failures presented, and can be used as indicators, establishing targets to be accomplished. The faults are present in all hospital units and are maximized in services that absorb large number of patients with varying levels of complexity, among which may be cited the intensive care, emergency and emergency services.1

Among the health services, the emergency sector, because of its turnover, assistance dynamic and performance of activities, aggregates factors such as stress and lack of professionals, which can trigger undesirable occurrences, with consequences for patients and professionals involved. The causes of the errors identified are related to work overload, diversion of attention, lack of knowledge, among others. The errors are considered a multidisciplinary problem, that require awareness of the professionals for the planning of goals to be implemented in the short, medium and long term for prevention and reduction of potential errors in the sector.6

The adverse event is an unintended injury or damage that resulted in disability, temporary or permanent impairment, or prolonged hospitalization as a result of the care provided. As a consequence, these grievances may require medical intervention, hospitalization or its prolongation, besides the rise in health costs and the risk of death for the patient.7

Thus, the highlight presented by iatrogenic processes in the setting of current health, means that there is a need to map, monitor and minimize these events, arising in this panorama the risk management. It is defined as risk management the culture, structures and processes aimed at recognizing potential opportunities and concurrently manage their adverse effects.8

During patient care errors and adverse events are poorly explored and studied. Every event that involves damage or even one that represents potential harm to the client, must be communicated and reported through the appropriate tool, since in situations where there is an error but no correspondent damage, adverse events go unreported. This fact leads us to believe that adverse events are identified by health professionals as something unusual, thus generalizing its occurrence. When the error is trivialized or not recognized, the direct result is the underreporting. Consequently, cases that become of public knowledge correspond only to the edge of an immense iceberg.1

Patient safety is a fundamental principle of care and a critical component of quality management. Studies involving the subject are focused on the flaws in the system of care, i.e., failures attributed to hospital organization. Unintentional failures occur due to the complex nature of care, which involves a large number of interventions and aspects of which no health professional can control. This risk context requires that potential failures are anticipated and preventive procedures are implemented.9-10

In Brazil it is still not possible to effectively measure the occurrence of adverse events due to the absence of a single database to show the number and the analysis of the facts, though, there are some initiatives such as the Sentinel Network of ANVISA in partnership with Brazilian health services, that aim to build a prepared systematization for the reporting of adverse events in three categories: technovigilance, hemovigilance and pharmacovigilance.11
In this perspective, one can cite research conducted in the state of Rio de Janeiro where three hospitals were analyzed, showing that 8 out of 100 inpatients suffer one or more adverse events. But the most serious is that 67% of these events could be avoided through management actions.2

As a result of the imminent need to prevent the occurrence of adverse events in 2004, the World Health Organization (WHO) created the project “World Alliance for Patient Safety” which aims to prevent damage, with one of its central themes being the action called “Global Challenge”, which every two years takes a priority issue to be adopted.12

Managing risk is important because it reduces the incidence of disease and injury, shortens the treatment and/or hospitalization, improves or maintains the functional status of the patient, and increases its sense of well-being. Through risk management, financial resources employed in risk control are applied rationally, since the steps in this management enable the selection of what is essential and a priority in the execution of risk control procedures.13 14

The interest of this research came, after conducting awareness workshops on risk management and the implementation of an electronic system used for reporting adverse events in the emergency unit of a general hospital in the city of Belo Horizonte, in 2010, had nurses as multipliers and as target audience, all professionals related directly and indirectly to assistance.

From the foregoing, the problem in this study emerged, guided by the following questions: What is the perception of the nursing team of an emergency unit on risk management? What is the level of their knowledge about this subject? How is the adherence of this team to the electronic system for reporting adverse events?

When considering that the risk management and the reporting of adverse events are key pieces for the care and safety of the client, it is important to understand the perceptions of professionals in this process, thus contributing to the institution’s assessment of the impact of the workshops, level of staff knowledge and attitudes towards adverse events and the implemented reporting system. The present study aimed to understand the perception of the nursing staff of an emergency unit on risk management in healthcare, as well as the adherence of this team to the electronic system of reporting adverse events.

METHOD

A descriptive and exploratory field research with a qualitative approach. This approach was used in order to allow a broader assessment of the results, the possibilities of description, the explanation and understanding of the object of study.15 16

The qualitative method applies to the study of the history, relationships, representations, beliefs and perceptions; products of the interpretations of people regarding their experiences, their way of feeling and thinking.17

The field studied was the emergency unit of a large hospital in Belo Horizonte - MG, a reference in admission of urgencies and emergencies in the municipality.

The subjects of the study were 34 nursing technicians working in the referred unit, accounting for 42.5% of the total. Exclusion criteria adopted: workers who were on vacation and sick leave and two technicians who refused to participate in the survey.

The construction of the data was carried out in September 2011. Participants were approached by appointment, with orientation about the study and voluntary participation. To preserve anonymity it was chosen to identify individuals by the letter E, followed by the number corresponding to the interview. Data collection was carried out after signing the Free and Informed Consent Term (IC), through semi-structured interviews, audio-recorded, transcribed verbatim and subsequently stored in a database.

The interviews were interrupted when data saturation was noticed, which was characterized as sampling closure by theoretical saturation operationally defined as suspension of the inclusion of new participants when the data obtained begin to present, in the investigator assessment, some redundancy or repetition, not being considered relevant to persist in collecting relevant data.18

For the treatment of data the technique of content analysis of Bardin was used followed by the three steps proposed by the author: pre analysis, which consists in organizing the data; material exploration, determined by coding, classification of speeches and elaboration of relevant categories for the research objective and the third stage of the processing of results, inference and interpretation of data seeking its significance and validation.19 Moreover, simple statistical analysis was used through frequency calculation, which is a possibility within the content analysis.
Through the analysis of relevant fragments of the discourses four categories of analysis emerged: The team's knowledge of risk management in health; The occurrence of adverse events in the emergency unit; The reporting of adverse events; Interventions that promote the prevention of adverse events.

The study complies with ethical and legal precepts, in accordance with Resolution 196/96 of the National Health Council (CNS) and had the research project approved by the Ethics and Research Committee of the selected hospital, by CEAC number 02054212.7.0000.5098 and report number 0060.0.391.216.

RESULTS AND DISCUSSION

• Characterization of study subjects

The subjects had mean age of 34 years, with a female predominance (59%). Regarding the employment relationship, 91% were admitted through public competition and 9% by administrative contract regimen. As for the work shift, 59% belong to the daytime period and 41% night time and 53% had a workload of 30 hours per week and 47% a workload of 40 hours per week. The average working time in the emergency department was 3 years and 5 months.

◆ Category 1: Knowledge of the team on the management of health risks

In this category, we identified the knowledge that individuals have about managing risks. Most respondents (97%) stated that patients are subject to some kind of risk during assistance in hospitals, especially in emergency units, according to the speeches below:

- There is always a possibility of some error, especially since the assistance must be performed relatively quickly and dexterity, something sure could happen, medication errors, wrong dose and route. (E21)
- The demand is very large, we are likely to make mistakes, due to the large number of patients in relation to the number of employees. (E22)

The assistance risks are more intensified in emergency units, since they absorb large number of patients with varying degrees of severity, besides; they coexist with quantitative and qualitative deficiency of human resources and materials.¹ Studies by the Oswaldo Cruz Foundation in Brazilian hospitals, show that during the period of hospitalization, 7.6% of patients suffer some damage due to care, this percentage is similar to that observed in other countries such as Canada, Denmark and Spain.⁷

Regarding the knowledge of professionals about managing risks and adverse events, more than half of respondents (56%) presented conceptual difficulties, despite claiming to have participated in awareness programs on the issue, including by the institution itself.

- Risk management is like SOP, it creates rules to manage the urgency, should be performed by a person appointed to create a spreadsheet to identify the risks in the sector. (E29)
- What occurs and can cause damage to the employee or to the patient. The employee may be contaminated through a sharp pierce. (E17)

The registration of the speeches above, inconsistent under the conceptual point of view on the intrinsic definitions related to the topic of risk management and patient safety, subsidize the need for the development of educational programs that contribute to improving the quality of nursing care, in order to train professionals so that they contribute to the institution and society in relation to prevention of adverse events.²¹

Despite presenting conceptual difficulties, 53% of respondents state that all professionals involved in the care are responsible for managing risks in the assistance. Strategic actions should be implemented so that all staff is trained technically and ethically and feel co-responsible for quality care in order to minimize the occurrence of adverse events.²²

Some speeches point to this:

- The entire team, both the coordinator, the nurse and technician are responsible for managing the risk, because if we make a mistake, we have to report to the nurse who reports to the coordination, it is a team effort then, there is no A, B or C. (E24)

• Category 2: the occurrence of adverse events in emergency units

The most frequent adverse events were recognized by the participants: error in medication administration (62%) and falls from bed (56%). Other events such as: errors in prescription, withdrawal of tubes by the patients themselves, burn, accidental extubation and mechanical restraint injuries were reported less frequently.

- Sometimes we have patients with the same names, so the medications can be exchanged. (E9)
- Falls from the bed, medication errors are more common. (E28)
- Restraint in bed causes injury, but if the patient is not restrained it may fall from the bed. (E30)
According to research conducted at Harvard University, 38% of adverse events in hospitals are related to medication error and studies in the UK showed the occurrence of more than 200,000 falls within one year. A similar Brazilian study conducted in an university hospital in São Paulo, also showed that error in the administration of medications and falls are the most common events in the hospital environment.

In a study conducted in the Intensive Care Unit (ICU) of a general hospital in Rio Grande do Sul, the authors make reference to the emergence of adverse events of assistance to human error resulting in medication errors as the most common in ICU daily routine.

Faced with such evidences, and based on the statements of the subjects, there is a clear need for mechanisms that are able to minimize or stop the occurrence of these events, because prevention is crucial for those who want to provide quality and lower risk care.

When asked about adverse events related to the emergency unit, the fall of the bed (42%) and errors in medication administration (27%) were also the most cited, but in different proportions, which may be related to a greater retention of patients on stretchers and the absence of accompanying in these units.

Although the entire team is focused, the adverse event can happen because nobody is perfect, we see more falls of the bed, agitated patients really falls. (E9)

There are patients that turn with the stretcher and all, I think the right thing would be to keep them in bed. There are patients that remain in the stretcher for many days waiting for a vacancy. (E33)

Most respondents (55%) recognize that they have already committed an adverse event, but argue that they were induced by other professional to make the mistake:

The other day I made a furosemide in the patient thinking it was dipyrone, I was supposed to administer to the other patient, but the resident doctor led me to do this. I am not justifying my mistake, but he led me to doing this. (E9)

Authors of studies that follow this subject show that, errors can be influenced by several factors. Adverse events rarely occur by a single mistake, but by a break in the barrier of defense against the occurrence of events. They also affirm the existence of other factors that favor the occurrence of adverse events such as: technological advancement with incompatibility of the necessary personal improvement, distancing of own actions of each professional, lack of motivation, absence or limitation of the systematization and documentation of nursing care, delegation of care without proper supervision and overload of services.

Regarding the practice of drug administration, it is worth mentioning that this is one of the major responsibilities of the nursing team, since such practice determines that the care provided is exercised in an appropriate and safe way for the patient and, in this sense, it is essential that the errors are avoided. Therefore, it is necessary to standardize the knowledge among the team of nurses and their followers, with regard to the ethical-legal aspects involving quality deviations in providing assistance, particularly in the medication administration process and its implications.

Within the perspective presented, the code of ethics of Nursing, reworked by Resolution number 311/2007 of the Federal Board of Nursing (COFEN) establishes criteria for rights, duties and prohibitions for these professionals, and as fundamental principles assigns the following duties:

"Chapter I, Responsibilities and Duties".

"Art. 5 - Exercising the profession with fairness, commitment, equity, resoluteness, dignity, competence, responsibility, honesty and loyalty".

Art. 12 - Ensure the person, family and community nursing care free of damages resulting from malpractice, negligence or recklessness.

Considered unlawful action, therefore of prohibitive character to the professional, "to administer medications without knowing the action of the drug and without making sure of the possibility of risk (article number 30) and to execute any kind of prescriptions that compromise the security of the person (article number 32)." 25,58

Relating to the duties, article number 37 in its sole paragraph states:

Nursing professionals can refuse to perform therapeutic drug prescriptions in case of identification of error or illegibility, or in the lack of signature and registration number of the prescriber, except in urgency and emergency situations (...).

Despite the management of the type of adverse event in question, it is clear that the culture of most health professionals still remains tied to the process of responsibilization of “guilty” and identification of flaws, although studies in this area suggest the need for broad discussions involving a systemic and not individual view of the error and that Brazil (for almost a decade) already has a national policy for managing risks and adverse events, encouraging the
implementation of identification systems of these occurrences so that prevention is effective.

This assumption is justified by the results of this research showing that 56% of respondents claim to have witnessed the occurrence of adverse events caused by coworkers. In this regard, it is clear that the subjects feel more comfortable to report the error of a fellow rather than the actual error, as reported below:

I witnessed the administration of a medication that was not prescribed, the patient had a fever and my colleague administered dipyrone and the patient was allergic. (E16)

The administration of drugs without medical prescription demonstrates recklessness on the part of professionals, according to the Code of Ethics of Professional Nursing it is the professional’s responsibility to ensure to the customer assistance free of damages resulting from malpractice, negligence or imprudence.25

In the emergency room, the access to various classes of medications is free, which increases the risk for the occurrence of the error in the administration of medications during the critical phase of assistance.6

When asked about adverse events related to other professionals, 24% of subjects did not opine on the matter and 21% indicate the error in medical prescription as a facilitating factor for the occurrence of adverse events related to medication. Events such as pneumothorax, loss of venous access and accidental removal of the tube were also cited. The reports below point to this:

What is very common to happen is the error in the medical prescription, if the nursing professional is not experienced and careful, it can cause harm to the patient. (E17)

As prescriptions are typed and printed, many medications that were supposed to be suspended continue to be prescribed. (E11)

The research institution uses electronic prescribing, which should be a way to minimize errors, but according to the subjects, the errors are more likely to occur due to the common practice of doctors in copying previous prescriptions.26

Some factors were characterized as facilitators for the occurrence of adverse events according to the interviewees such as: work overload (15%), overcrowding of units (12%) and lack of communication between the multidisciplinary team (12%). Other factors showed less relevant percentages: shortage of staff, carelessness, recklessness, inexperience, lack of training, prescription error, inadequate identification of patients, customer turnover, neglect of professional who provides care, absences of routines, reduced physical space and excess of administrative activities. The data are affirmed as the speeches presented:

The error in assistance actually happens, due to the work overload, it happens not only by the nursing staff, but by the entire multidisciplinary team. (E32)

I think is the demand, there are a lot of patients, short staff, lack of communication. (E12)

Human error, in the various healthcare professions, can happen as a result of single or multiple factors, whether inherent to patient, physical plant, materials, equipment and human factors.27

- Category 3: The reporting of adverse events

Most respondents (68%) recognize the existence of an electronic program for reporting of adverse events in the unit and 41% reported having received training to use it. It is noteworthy; however, that 18% of respondents recognize that bed checklist, administrative book and Standard Operating Procedure are instruments of notification, which again denotes ignorance on their part, regarding the appropriate way to make this record.

Regarding the act of notifying, 68% of subjects did not feel able to carry out electronic notification, recognizing that this is a nurse’s assignment, as they consider it administrative routines. When questioned if they have ever reported some adverse event, only 35% affirmed positively.

Once, the patient fell from the stretcher and got hurt, I didn’t notify, because everyone was there, a doctor and the nursing supervision. (E8)

The event is something that I had to notify, but I didn’t, I did not have time, I communicated only to the nursing supervision. (E3)

Of the subjects who performed notification, 50% report having notified its own events and 50% adverse events produced by coworkers. The data are affirmed according to the speeches presented:

If the adverse event happen with me I will notify, but if it happened with my colleague it is up to him, I would not report, I would leave it to him, following each one’s conscience. (E9)

I even communicated the event committed by my colleague to supervision, because I found it very serious. (E10)
Failure in notifying prevents events from being evaluated, making it difficult to implement preventive actions. The reporting of adverse events is an assignment of all professionals, being indispensable that they know the tool and feel safe and able to do so. To understand the act of notification is an important step to stipulate policies that ensure the safety of patients seeking assistance in hospitals. 25, 28

Subcategory 3.1: Factors that influence the act of notifying

When asked about the factors that influence the reporting of adverse events, 30% of respondents say they are afraid of repression from colleagues and 27% said they are afraid of punishment.

I think it would be the fear of punishment, it should be clear to all staff, that notification is made so that the error no longer occurs and not for punishment. (E16)

The feeling built in the past around punitive acts, where the warnings from the head of nursing were used as strategies to reduce the amount of errors, evidenced the error as an individual cause and not as a systemic failure. 2 This fact is complemented by Carvalho and Cassiani when they affirm that the numbers of reported errors in hospitals refer only to the tip of the iceberg, since the reported errors are often only those who cause damage to the patient. 29

Of the staff that carried out the notification in the electronic system, only 8% reported a feedback of the institution, a fact that discourages staff and encourages underreporting.

I never received a feedback from the institution, I think that's why nobody notifies, we do not have a feedback. (E5)

There was no feedback, I hoped there would be an answer, this is what discourages us. (E20)

The notification of adverse events facilitates the investigation of the quality of care, it should foster communication between the team and the institution, and however, according to reports of the subjects this communication has not been reliable, since they have not received feedback regarding notified adverse events. 22

Another factor that makes it worth regarding the notification is the stimulus from the superiors. This directly affects the interest of the employee to report the occurrence of adverse events: 53% of the subjects claim to have received encouragement from supervisors, which is exposed in the report below:

The supervisors are well aware of and advise professionals, stimulating to do the notifications. (E15)

On the other hand, 47% report that the stimulus exists, but is not constant, this occurs upon the occurrence of the adverse event, which is beyond the conception of prevention. This is evidenced in the speeches:

There is not much talk, we are only stimulated when an adverse event occurs. (E1)

I think it's because there is no routine, obligation to notify, if it were equal to an evolution, which is mandatory, we would. (E2)

The motivation for the work is an aspect that interferes with the process of human relations, productivity and quality of life. Accordingly, the stimulation of supervisors is of paramount importance for the implementation of every and any tool associated to the working process. 30

Category 4: Interventions that promote the prevention of adverse events

Participants were asked to suggest interventions for the continuous process of improvement of the work focused on the prevention of assistance adverse events. Factors such as adequacy of the number of employees, reduced absenteeism and continuing education are cited as measures to prevent the occurrence of adverse events, as reported below:

In the emergency room, the staff are overloaded, stressed, some take some leave, this favors adverse events, this should be considered to reduce the chance of errors. (E9)

If you did not work with reduced shifts errors would happen less. When some employees are absent you take on more patients and need to pay attention to more serious ones, there may come an adverse event. (E6)

The professionals working in emergency units face conflicts, daily, by acting in crowded environment, with human resources, technological and physical structure not always adequate, not offering adequate conditions to accommodate users safely and with quality. 31

One of the measures to prevent emergence adverse events would be training, continuing education for employees. (E17)

I think training, to provide conditions for everyone to work properly. (E20)
Constant training in an educational way. (E15)

Note that continuing education is essential for the development of people and ensures the quality of care for customers, should also be focused on the reality of the institution and the staff needs. Faced with the new requirements of health organizations, nursing faces continuous transformations, which shows that people need to seek the best way to expand their knowledge, and one way is the education and continuous learning.32

CONCLUSION

Health institutions should have as a basic principle to offer the customer a safe and qualified care. The present study showed that the majority of respondents correctly identified the adverse events and was aware of the subject, however, the adherence to the electronic system for reporting adverse events is still small, which leads to underreporting.

Risk management should be part of the routine of health institutions, especially the emergency units, in which the high volume of patients, the unpredictability, the requirement for continuous monitoring and rapid and specialized care increase exposure to assistance risks and the likelihood of adverse events.

For these services to have greater efficacy in addressing adverse events and therefore minimize their impact on the costs and damage to patients, the practice of educational interventions for the multidisciplinary team involved in the care becomes essential, in order to better identify and to better prevent the occurrence of adverse events. Continuing education is necessary for construction of new health practices and service organization, given the challenges of the current scenario.

From this perspective, the awareness of the collaborators regarding the recognition and reporting of error is of paramount importance. Undoubtedly, this will only occur with the change of culture coined in the “guilt” and identification of “guilty” to a systemic view of the error process, which higher level focus on the proper identification of the causes that led to the failure to effectively correct them and prevent new events. Thus, more effective training, systematic and regular become necessary for the team to internalize concepts and attitudes essential for the risk management and handling of the notification system so that there is, therefore, a change in practice.

The research shows, however, some limitations. The method used in this research, of a qualitative approach with content analysis, evaluated the perception of the nursing staff of the emergency unit of a specific hospital in the city of Belo Horizonte, Minas Gerais, not allowing generalizations to other institutions. The data analyzed show the subjective perception of these nursing professionals and that is related to their work process and prior knowledge. It is essential to emphasize that, although the categories surveyed are significant, according to the theoretical framework presented, they do not exhaust the possibilities of the themes under study.

Undoubtedly, it is expected that the results may contribute to the strengthening of the organizational culture focused on patient safety, and contribute to the creation of new research related to the theme.

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Risk and adverse events management in an...