



ORIGINALES

Analysis of notifications of adverse events in a private hospital

Análise das notificações de eventos adversos em um hospital privado

Análisis de notificaciones de eventos adversos en un hospital privado

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ABSTRACT:

Introduction: patient safety, in the current context, began to be investigated in the different health fields, aiming to reduce the incidence of damages and adverse events to patients.

Objective: to identify and analyze adverse events that compromise patient safety during nursing care in a private hospital.

Methods: exploratory, documentary and retrospective research. The instrument of data collection was the report of adverse event notification used by the hospital composed of open and closed questions.

Results: the researchers analyzed 262 reports of adverse/incident events that occurred in the period 2015 to 2016. The contributing factors for the occurrence of adverse events were caused by human failure. Of the total number of forms analyzed, 161 (61.83%) reported carelessness and distraction. The omission was highlighted with 11 (4.20%) cases. The lack of attention with the patient led to 116 (44.27%) errors in medication administration, 46 (17.56%) failures during the typing and transcription of the medical prescription and 35 (13.36%) failures in care.

Conclusion: the incidents are caused by human factors, with possible reversion. When investigated, they can be minimized, which contributes to quality and safety in patient care.

Keywords: Nursing; Patient safety; Damage

RESUMO:

Introdução: A segurança do paciente, no contexto atual, passou a ser investigada nos diversos campos da saúde, com o objetivo de reduzir a incidência de danos e eventos adversos aos pacientes.

Objetivo: Identificar e analisar os eventos adversos que comprometem a segurança do paciente durante a assistência de enfermagem em um hospital privado.

Métodos: Pesquisa exploratória, documental e retrospectiva. O instrumento de coleta de dados foi o relatório de notificação de eventos adversos utilizado pelo hospital composto por questões abertas e fechadas.

Resultados: Analisaram-se 262 relatórios de notificação de eventos adversos/incidentes que ocorreram no período de 2015 a 2016. Demonstra-se que o fatores contribuintes para a ocorrência dos eventos adversos foram causados por falha humana. Do total de formulários analisados, 161 (61,83%) apontaram descuido e distração. A omissão se destacou com 11 (4,20%) casos. A falta de atenção com o paciente propiciou 116 (44,27%) erros na administração de medicamentos, 46 (17,56%) falhas durante a digitação e transcrição da prescrição médica e 35 (13,36%) falhas na assistência.

Conclusão: Percebe-se que os incidentes são causados por fatores humanos e de possível reversão. Quando investigados, podem ser minimizados, o que contribui para a qualidade e segurança no cuidado ao paciente.

Palavras chave: Enfermagem; Segurança do paciente; Dano.

RESUMEN:

Introducción: La seguridad del paciente, en el contexto actual, pasó a ser investigada en los diversos campos de la salud, con el objetivo de reducir la incidencia de daños y eventos adversos a los pacientes.

Objetivo: Identificar y analizar los eventos adversos que comprometen la seguridad del paciente durante la asistencia de enfermería en un hospital privado.

Métodos: Investigación exploratoria, documental y retrospectiva. El instrumento de recolección de datos fue el informe de notificación de eventos adversos utilizado por el hospital compuesto por cuestiones abiertas y cerradas.

Resultados: Se analizaron 262 informes de notificación de eventos adversos / incidentes que ocurrieron en el período de 2015 a 2016. Se demuestra que los factores contribuyentes para la ocurrencia de los eventos adversos fueron causados por fallo humano. Del total de formularios analizados, 161 (61,83%) indicaron descuido y distracción. La omisión se destacó con 11 (4,20%) casos. La falta de atención con el paciente propició 116 (44,27%) errores en la administración de medicamentos, 46 (17,56%) fallos durante la digitación y transcripción de la prescripción médica y 35 (13,36%) fallos en la asistencia.

Conclusión: Se percibe que los incidentes son causados por factores humanos y de posible reversión. Cuando son investigados, pueden ser minimizados, lo que contribuye a la calidad y seguridad en el cuidado al paciente.

Palabras-claves: Enfermería; Seguridad del paciente; Daños.

INTRODUCTION

Currently, there have been reports about errors and events that occur in hospital care and involving all professional categories⁽¹⁾. The consequences of these events in health systems bring negative impacts for both patients as their families, as well as for the organizations and society⁽²⁾. In addition, such situations can cause temporary or permanent injury to the patient and often relate to the actions performed by the health professional or team⁽³⁾.

Regarding the aforementioned damages, studies indicate the occurrence of adverse events (AEs) in the care process for hospitalized patients, which, in turn, cause complications in the evolution of their recovery, increased infection rates and average time of hospitalization⁽²⁾.

The AEs occur during healthcare provision and result in damage to the patient, which can be physical, social and psychological, and includes illness, injury, suffering, impairment or death⁽⁴⁾.

Incidents can be defined as the events or circumstances that could result or resulted in unnecessary damage to the patient, which can originate from intentional acts or not⁽⁵⁾.

In Brazil, the estimate of the evaluation of the incidence of adverse events (AE) in hospitals was 7.6%. The authors observed that, of the total number of AEs, 67% were classified as avoidable; the most frequent events were related to surgery, followed by those associated with the clinical procedures ⁽⁶⁾.

With the purpose of reducing these failures and increase the number of safe practices, health institutions throughout the world are investing in actions aimed at care quality and that seek a culture of safety for patients, professionals and environment ⁽⁷⁾.

Thus, the quality and patient safety are the responsibility of all professionals, including the nursing team, which plays a fundamental role in the prevention of adverse events⁽⁸⁾.

In this context, an important initiative in Brazil was the creation, in 2011, of the Brazilian Network of Sentinel Hospitals, with the aim of stimulating these services to notify the adverse events, through the system of Sanitary Surveillance Notification (NOTIVISA) ⁽⁹⁾. For this, the National Sanitary Surveillance Agency (ANVISA) has drafted the Resolution of the Collegial Board of Directors (RCBD) N. 63 of 25 November 2011 which provides for the requirements of good operating practices for health services in the RCBD, and in section II of art. 8th, clarifies strategies for actions related to patient safety (PS) regarding the prevention of adverse events related to health care ⁽¹⁰⁾.

In 2013, in Brazil, there was the publication of Ordinance N. 529, the National Program for Patient Safety (NPPS) with the general objective to contribute to the qualification of health care throughout the national territory, and in Article 3, establishes the implementation of Patient Safety Cores (PSC) ⁽¹¹⁾.

In July 2013, the RCBD N. 36 of ANVISA established recommended actions for PS promotion and the improvement of quality in health services ⁽¹²⁾. In the same year, the ordinance n. 2,095 adopted the basic protocols of PS, namely: prevention of falls; identification of the patient; safety in prescription and use and administration of medicines. These protocols aim to establish actions and behaviors for patient safety in healthcare services and the improvement of quality in national character and should be used in all health units in Brazil ⁽¹³⁾.

Thus, an effective PS requires notifications, which are important tools for implementing health actions and projects. Such data may support the evaluation of the effectiveness of services ⁽¹⁴⁾.

Therefore, nursing professional practice needs to be permeated by the experience and everyday perception of risk situations that may subsidize care management ⁽¹⁵⁾. The contribution of nursing regarding PS is the ability to prevent, identify and notify the adverse events that may happen during the care provided to the patient ⁽¹⁶⁾.

Therefore, in nursing care, AEs are facts in various institutions, subject to correction, through safety measures and prevention actions. This provision aroused the interest of investigating: what are the main adverse events related to nursing care in medical and surgical clinics in a private hospital?

The motivation for this work resulted from the experiences and observation of adverse events occurring in nursing care during the practical classes and internships. There

was also a deficiency of guidance related to PS. The lack of communication and strategies related to the theme can compromise the care provided to the patient. Thus, this study aimed to identify and analyze the adverse events that compromise patient safety during nursing care in a private hospital.

MATERIAL AND METHODS

This is an exploratory research, documentary, retrospective research, with quantitative approach. The exploratory research allows familiarizing with the subject still little known and explored. A documentary research uses data from the institution and the material that has not yet received an analytical treatment and may be re-elaborated according to the research objectives ^(17,18).

Data collection for the study was performed at a private, general hospital, located in Natal, Rio Grande do Norte, which works with 760 employees, has 76 apartments, 36 beds in the infirmary, surgical center and two ICUs: a general and another for patients with cardiovascular diseases, with a total of 21 beds.

The data collection instrument was the form of notification of adverse events used by the hospital that has open and closed questions. The document addressed the patient identification, the classification of the adverse incident/event and the degree of damage. With the use of this report, the origin of the adverse event, the contributing factors, how it was detected and who notified it were also identified.

Data selection for inclusion was performed through the reports of notifications of adverse events/incidents that have occurred in the period from 2015 to 2016, which were organized and tabulated in the software Microsoft Office Excel 2016. After this step, descriptive statistical analysis was carried out with the construction of frequency distribution tables.

The study met the national technical and ethical standards in researches involving humans, regulated by Resolution nº 466/2012 of the National Health Council (NHC) and was approved by the Research Ethics Committee (REC) of the Potiguar University (UnP) upon presentation certificate for ethical consideration (CAAE) n. 62450216.0.0000.5296 and Opinion n. 1,857,320 issued on 08 December 2016.

RESULTS

Two hundred sixty-two reports of adverse events that occurred in the period from 2015 to 2016 were analyzed. As observed in table 1, 133 (50.76%) of the affected patients were female and 129 (49.24%) of the male sex. Furthermore, 4 (1.53%) are 0 through 18 years old, followed by (16) 6.11% from 19 to 35 years, 57 (21.36%) in the age range 36 through 59 years, 135 (51.53%) over 60 years old and 50 (19.08%) forms did not include the patient's date of birth.

Table 1 - Patients' distribution according to sex and age. Natal/RN, Brazil, 2017.

Sex	n	%
Male	129	49.24
Female	133	50.76
Age Group		
0-18 years	4	1.53
19-35 years	16	6.11
36-59 years	57	21.76
Over 60 years	135	51.53
Not informed	50	19.08
Total	262	100

Source: elaborated by the authors (2017).

Table 2 presents the origin of the adverse incident/event. In the clinical sector, there were 162 (63.83%) cases, which represented the largest number of cases of the sector.

Table 2 - Origino of the adverse event. Natal/RN, Brazil, 2017.

Sector	n	%
Clinic	162	61.83
Surgical	84	32.06
Emergency Room	3	1.15
Not informed	13	4.96
Total	262	100

Source: elaborated by the authors (2017).

In relation to the classification of the adverse incident/event, there was a significant difference in the numbers related to error in medication administration in comparison to the others. There were 116 (44.27%) errors in medication administration. The failure during typing/transcription of medical prescription totaled 46 (17.56%), while the failure during health care totaled 35 (13.36%). There were 19 (7.25%) patient falls, 16 (6.11%) occurred with two or more simultaneous incidents, 8 (3.05%) failures in administrative activities, 8 (3.05%) failures in communication, 5 (1.91%) uninformed incidents. There were also 3 (1.15%) failures in the identification of the patient, 2 (0.76%) failures during surgical procedure, 2 (0.76%) skin lesions by pressure, 1 (0.38%) failures in the documentation and the same amount of failure in the administration of diets.

In relation to the severity of the AEs occurred, 101 (38.55%), a datum representing the majority of affected patients, did not have any type of damage, while 95 (36.26%) patients did not have the degree of damage reported in the form of notification of adverse event. The mild damage affected 51 (19.47%) of the patients registered, there were also 11 (4.20%) moderate damages and 4 (1.53%) severe damages, with no death record.

Table 3 – Degree of Damage. Natal/RN, Brazil, 2017.

Degree of damage/adverse event	n	%
None	101	38.55
Mild	51	19.47
Moderate	11	4.20
Severe	4	1.53
Not informed	95	36.26
Total	262	100

Source: elaborated by the authors (2017).

Table 4 shows the most significant factors that contributed to the adverse incidents/events related to assistance, and the carelessness, distraction factor had an incidence of 162 (61.83%). Some analyzed reports of notifications described more than one contributing factor 28 (10.69%). Fifteen (5.73%) did not inform the factors, 11 (4.20%) were the omission, communication failures were present in 10 (3.82%) and other factors 8 (3.05%) cases.

Table 4 – Contributing Factors. Natal/RN, Brazil, 2017.

Contributing factors	n	%
Carelessness, Distraction	162	61.83
Omission	11	4.20
Work Overload, Fatigue, Burnout	6	2.29
Adverse problem/event during work	7	2.67
Non-compliance with the standards	6	2.29
Inadequate absence, information transmission while changing shifts	1	0.38
Adverse problem/event in communication comprehension (oral or written)	6	2.29
Illegible information (Chart, patient form)	2	0.76
Communication failures	10	3.82
Others	8	3.05
Not informed	15	5.73
Two or more simultaneous factors	28	10.69
Total	262	100

Source: elaborated by the authors (2017).

DISCUSSION

The evaluation of the assistance is an important tool in the control of health work processes. In nursing care, the expectation is to ensure the best possible result within the clinical conditions and the severity of the patients, with the lowest rates of complications arising from procedures performed ⁽⁵⁾.

The results show that most adverse events/incidents analyzed in that hospital affected patients aged over 60 years, with a predominance of women. In the classification of

adverse events, errors of administration of medications were the most frequent, with 44.27% of the cases. These were related to the administration of hypoglycemic agents and insulin, medications that can cause damage to the patient when there are failures in the process of administration. The presence of adverse events related to drugs in hospitals compromise patient safety, thus, this subject is of extreme importance ⁽¹⁹⁾. The results reinforce the need of all professionals to adhere safety standards for the use of medicines in the hospital environment ⁽²⁰⁾.

There are several measures already referenced in the literature as strategies for reduction and prevention of medication errors at hospital institutions. One of them is the investment in technologies such as the deployment of electronic medical prescription, bar code, automation of the dispensation of medications in unit doses, in addition to using intelligent infusion pumps ⁽²¹⁾.

These errors may result from the difficult understanding of prescription, which hinders the work of nurses and technicians, potentiating the risks and compromising the patient safety, as observed in a study conducted in the sector of medical clinic of a public hospital of the Federal District, Central Brazil ⁽²²⁾.

The existence of cases of falls of patients in the study, an event also identified, needs to be carefully assessed, because it has the potential to cause injury and sequelae, prolong the time and costs of hospitalization, with consequent legal accountability of the health team and the institution ⁽⁵⁾.

The fall of patients in the researched hospital was more prevalent at their own height. According to a study conducted at two long-term institutions in Campos Gerais, Paraná, most of these adverse events/incidents occur by possible changes of balance in elders, while walking in unknown environments ⁽²³⁾.

Therefore, as analyzed in the research, communication is an essential tool in order to avoid failures. A break in this process may allow losses in the understanding of vital information of the patient, compromising care continuity. The communication between teams allows knowing all the issues relating to the hospitalized patient ⁽²⁴⁾.

Considering the aforementioned problem, when compared to a study with volunteers from a North American hospital, the impairment of the process of communication among professionals occurs with greater frequency while changing shifts. In some cases, there is omission of important data and lack of precision or inconsistency of information that are aggravated with the presence of interruptions and noises. The inadequate number of professionals has also been implicated as a barrier, because the fatigue causes distractions and consequent failures in the communication process ⁽²⁵⁾.

The analysis evidenced that the carelessness and lack of attention contributed to the adverse incidents/events, with 162 (61.83%) of the analyzed cases. Of the adverse incidents/events analyzed, 101 (38.55%) patients suffered no damage. This suggests that the researched institution maintains a level of concern, if compared to other hospital contexts; however, the process of notification of these events needs to be improved because there was a considerable number of uninformed fields on the instrument of notifications.

CONCLUSION

The research showed that adverse events may have various causes and lead to different degrees of damage. Regardless of the degree of damage suffered, the event data should be well clarified in the form of notification for mapping the existing errors and correct possible failures. The data analysis allowed observing that many important information have not been fulfilled, which compromises the traceability and can be highlighted as a limitation of the study.

The research concluded that the events were primarily caused by professionals' carelessness and omission. These findings will serve for future consultation and analysis of errors with the aim of reducing the exposed numbers and improve the quality and safety in patient care.

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