

Nursing errors in the media: patient safety in the window

Erros de enfermagem na mídia: a segurança do paciente na vitrine

Errores de enfermería en los medios: la seguridad del paciente en la vitrina

Elaine Cristina Novatzki Forte¹

ORCID: 0000-0002-6042-5006

Denise Elvira Pires de Pires¹

ORCID: 0000-0002-1754-0922

Maria Manuela Ferreira Pereira da Silva Martins^{II}

ORCID: 0000-0001-5530-3891

Maria Itayra Coelho de Souza Padilha¹

ORCID: 0000-0001-9695-640X

Dulcinéia Ghizoni Schneider¹

ORCID: 0000-0002-5416-2078

Letícia de Lima Trindade¹

ORCID: 0000-0002-7119-0230

¹ Universidade Federal de Santa Catarina.
Florianópolis-SC, Brasil.

^{II} Universidade do Porto, Escola Superior de Enfermagem do
Porto. Porto, Portugal.

How to cite this article:

Forte ECN, Pires DEP, Martins MMFPS, Padilha MICS,
Schneider DG, Trindade LL. Erros de enfermagem
na mídia: a segurança do paciente na vitrine.
Rev Bras Enferm [Internet]. 2019;72(Suppl 1):189-96.
[Thematic Issue: Work and Management in Nursing].
DOI: <http://dx.doi.org/10.1590/0034-7167-2018-0113>

Corresponding Author:

Elaine Cristina Novatzki Forte
E-mail: elainecnforte@gmail.com



Submission: 03-05-2018

Approval: 05-19-2018

ABSTRACT

Objective: To analyze the nursing errors reported by the journalistic media and interpret the main implications of this communication for the visibility of this problem. **Method:** Documental research, qualitative, descriptive and exploratory, with data collected in news reports from Brazil and Portugal, analyzed through hermeneutics with resources of Atlas Software. **Results:** We analyzed 112 news items published between 2012 and 2016 that resulted in six categories: *Year - highest occurrence in 2012; Age group of the patient - children; Professional category - nurses; Type of error - medication; Outcome - death; Possible attributed cause - occupational conditions.* **Final considerations:** Nursing mistakes are a challenge for the profession, and the way they are communicated by the media is not very explanatory, contributing to a negative visibility of the profession, and to making society insecure. Improving the way they are served in the media contributes to the visibility of the problem without affecting the professional image.

Descriptors: Patient Safety; Nursing; Media; News; Security Management.

RESUMO

Objetivo: Analisar os erros de enfermagem noticiados pela mídia jornalística e interpretar as principais implicações dessa comunicação para a visibilidade dessa problemática. **Método:** Pesquisa documental, qualitativa, descritiva e exploratória, com dados coletados em notícias de jornais do Brasil e Portugal, analisados por meio da hermenêutica com recursos do *Software Atlas.ti*. **Resultados:** Foram analisadas 112 notícias publicadas entre 2012 e 2016 que resultaram em seis categorias: *Ano – maior ocorrência em 2012; Faixa etária do paciente – crianças; Categoria profissional – enfermeiros; Tipo de erro – medicação; Desfecho – morte; Possível causa atribuída – condições de trabalho.* **Considerações Finais:** Erros de enfermagem constituem um desafio para a profissão, e a forma como são comunicados pela mídia é pouco explicativa, contribuindo para uma visibilidade negativa da profissão, e para deixar a sociedade insegura. Melhorar a forma como são veiculados na mídia contribuem para a visibilidade do problema sem afetar a imagem profissional.

Descritores: Segurança do Paciente; Enfermagem; Meios de Comunicação; Notícias; Gestão da Segurança.

RESUMEN

Objetivo: Analizar los errores de enfermería noticiados por los medios periodísticos e interpretar las principales implicaciones de esa comunicación para la visibilidad de esta problemática. **Método:** Investigación documental, cualitativa, descriptiva y exploratoria, con los datos recogidos en los informes periódicos de Brasil y Portugal, analizó utilizando la hermenéutica con fondos de la *Atlas.ti Software*. **Resultados:** Se analizaron 112 noticias publicadas entre 2012 y 2016 que resultaron en seis categorías: *Año - mayor ocurrencia en 2012; Edad del paciente - niños; Categoría profesional - enfermeros; Tipo de error - medicación; Descenso - muerte; y Posible causa atribuida - condiciones de trabajo.* **Consideraciones finales:** Los errores de enfermería constituyen un desafío para la profesión, y la forma en que son comunicados por los medios es poco explicativa, contribuyendo a una visibilidad negativa de la profesión, y para dejar a la sociedad insegura. Mejorar la forma en que se transmiten en los medios de comunicación contribuyen a la visibilidad del problema sin afectar la imagen profesional.

Descritores: Seguridad del Paciente; Enfermería; Medios de Comunicación; Noticias; Gestión de la Seguridad.

INTRODUCTION

Patient safety has assumed international relevance in order to prevent adverse events and improve health care worldwide. This is considered by the World Health Organization (WHO) as minimizing the risk of unnecessary damage during health care⁽¹⁾. In this context of concern for patient safety, this discussion has strengthened and encouraged many studies that have alarmed health professionals and society internationally. In the face of such concern and great impact on people's health, WHO has created the World Alliance for Patient Safety to reveal the key factors that can influence patient safety. Thereafter, WHO defined incidents as an event or circumstance that results in unnecessary harm to patients, and adverse events are classified as incidents involving unintentional errors⁽²⁾.

Corroborating the international discussion on this issue, many countries have undertaken security policies aimed at reducing the risks associated with health care. Brazil established the National Patient Safety Program (PNSP - *Programa Nacional de Segurança do Paciente*) in 2013, which recommends the elaboration and implementation of protocols in all health institutions in the country⁽³⁾. These protocols serve as guidelines for the implementation of good practices focused on patient safety⁽⁴⁾.

Despite all these interventions and incentives to promote safer health care environments, errors continue to occur and the consequences of these incidents have been highlighted in the media, in the most diverse forms, print media, television, internet and social networks. The incidents involving these errors are reported in the media, leaving people susceptible to fear and a sense of insecurity about health care. This fear is especially relevant when adverse drug-related events and neglected attitudes are highlighted by health professionals, especially when the reported incidents refer to complications in the health and death of patients⁽⁵⁾.

The news, in general, aims to inform society about the events, however, it is increasingly noted the use of persuasive techniques capable of inducing certain thoughts in people. Thus, not always what is reported is the truth of the facts and also lack important information that can lead to erroneous judgments. When dealing with human errors, we must think of the immensity of causes that may be linked to these events, and which culminate in the loss of treatment of patients.

OBJECTIVE

To analyze the nursing errors reported by the journalistic media and interpret the main implications of this communication for the visibility of this problem.

METHOD

Ethical aspects

It should be noted that, for the purposes of this study, direct involvement with human beings was not necessary, since the data collection was done in public domain documents; this was not evaluated by the Ethics Committee, following the recommendations of Resolutions 466/12 and 510/2016 of the National Health

Council (*Conselho Nacional de Saúde*). However, all the professionals and patients exposed in the reports had the anonymity guaranteed in this research, as well as the newspapers consulted. When necessary, the newspapers were identified by acronyms containing the country, the region and a serial number (example: newspaper of the southern region of Brazil, news 1 - NBS1). In addition, the content of the texts released was maintained in full, excluding parts that identified those involved.

Theoretical-methodological framework and type of study

This is a qualitative, retrospective, descriptive and exploratory research, exclusively documentary, that made use of an interpretative approach for data analysis. The study was guided by the theories of Karl Marx's Work Process and Jürgen Habermas's Communicative Action along with current discussions about patient safety issues. The first allows us to understand nursing work within a historical and social context⁽⁶⁾. The second provides the understanding that language is action, that is, that which is communicated to people is action and, to the same extent, impels other actions in free interaction through rationality⁽⁷⁾.

The patient's safety and all the issues involved in this theme bring to the reflection on human errors in the area of Health, its severity and the impact on the lives of people, professionals and the health system itself.

Study setting

Two countries were the setting for this study, Brazil and Portugal, both chosen for having Portuguese as their mother tongue, in order to facilitate the interpretative analysis of journalistic texts by the researchers. And although they have distinctions in the organization of nursing work and in the scope of workforce formation, they share some problems and some regulatory aspects. The study was conceived, not as a comparative study, but with the intention of analyzing two distinct realities, in order to provide an understanding of the phenomenon in greater depth.

Brazil is a continental country, with a large contingent of nursing professionals, more than two million, subdivided into three groups with distinct degrees (auxiliary, technician and nurse). It is also a country with very active press, with freedom guaranteed by the Federal Constitution, but, according to the World Press Freedom Ranking, it holds the 103rd position among 180 countries, a situation classified as sensitive⁽⁸⁻⁹⁾. Across the Atlantic Ocean we have Portugal, a small country, with a little more than 60 thousand nurses, all graduates in non-university higher education and press recognized for their freedom, occupying the 18th position of the World Press Freedom Index published in 2017⁽⁹⁾.

Data source

The source for the data collection was composed of newspapers of great circulation in the two countries surveyed, available online and representing the different regions of the two countries. There were 112 interviews in 11 newspapers in Brazil, and 10 in Portugal. The study period comprised between the years of 2012 and 2016.

Collection and organization of data

The data collection took place through news that contained in its scope of episodes involving errors of nursing professionals. The analyzed documents were acquired through newspaper clippings or digital signature that allowed access to the reports.

After intentionally applying the criterion of choice that refers to the news that dealt with errors made by nursing professionals during health care, the documents were saved in PDF (Portable Document Format) format and inserted in the Software Atlas.ti (Qualitative Data Analysis), for later analysis and codification.

Data analysis

Data analysis was done through dialectical hermeneutics, following the steps suggested by Paul Ricoeur. Firstly, the selected documents were inserted in Atlas.ti software, version 7.5.1, each with the name of Primary Document (PD), with a previous identification code in order to maintain the anonymity of those involved in the reports. All the content of the search was saved within a Hermeneutic Unit (HU).

The analysis and interpretation procedures were started, with the exhaustive reading of the documents in order to identify the meanings of the units of analysis⁽¹⁰⁾. In the coding (codes, in the terminology of Atlas.ti), the first units of analysis were grouped according to year, professional category of nursing, age of error victim (child, adult, elderly), error outcome, type of error and possible cause of error, all with easy identification in the texts.

The second step was the search for what was revealed by the data, identifying the possible meanings. In this stage, the primary codes are interpreted, and systematic confrontations are performed with that described in other parts of the text, in order to assign the most adequate coding to the units of analysis. It is at that moment that the theoretical framework adopted contributes to the interpretation of the meanings expressed in the texts. In the texts where the first information was partial, more complete information was given from what emerged later.

Sensitivity is manifested in the third and last step of the hermeneutical analysis, and aims at clarifying meanings, which makes it possible to establish new networks of meanings⁽¹⁰⁾, and when confronted with the total information gathered, establishes (or not) relevance of the information about nursing mistakes for society. The categories presented in this study, although they have numerical incidence in order to demonstrate the frequency of certain phenomena, were also considered in order to understand the phenomenon under study as a whole. This form of analysis was validated by a philologist, with expertise in Portuguese language and interpretive hermeneutic analysis.

RESULTS

The documentary corpus that composed this study was constituted of 112 reports of 21 newspapers of great circulation in two countries of Portuguese language. Some news refer to the same incident, that is: in Portugal, 18 news items were published in the period studied and in Brazil 94 news items were published. Therefore, the data presented refers to the number of news items

published and not to the different facts, which directly interferes with the numerical increase of certain information. This choice was made because the focus of this study was to know these incidents through the lens of the media.

The results were divided into six categories that compose the analysis, with the purpose of characterizing the general panorama of the news that sent the nursing errors. From the time cut used for this study, the year 2012 had the highest number of occurrences in the total sum of data, with 44 reports, and Brazil represented 39 of these. In 2015, Brazil had only 9 reports. In Portugal, the year with the most reports found was 2016, with 10 news stories.

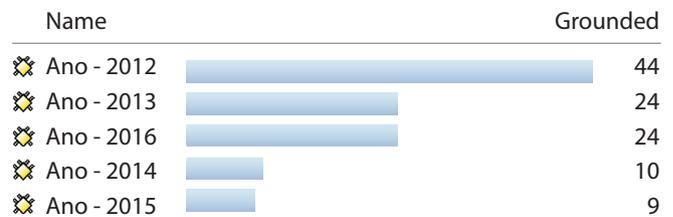


Figure 1 - Representation of the number of Brazil - Portugal reports per year surveyed, generated in the Atlas.ti code manager

The age group of patients who suffered some errors during nursing care and who was reported during the study period was divided into three age groups: children, adults and the elderly, the most affected being children, with more than 50% of the cases in both countries studied, represented by the following word cloud. However, to give more emphasis in these cases, the word "child" appears prominently, and in most of the news, along with the photo of the child or mother in a state of crying.

Patient - child {55-0} Patient - elderly {30-0} Patient - adult {19-0}

Figure 2 - Age bracket of patients who were victims of nursing errors according to the Brazil-Portugal reports, generated in the Atlas.ti cloud view

Regarding the professional category involved in the reported errors, the nurses hold the first place and appeared in 53 news stories (35 in Brazil and 18 in Portugal). Still in Brazil, the nursing technicians are followed in 44 reports and the nursing assistants appear in 13 news items; and the nursing students in the traineeship period appeared in 6 reports, which were still under technical training. Two of the reports analyzed did not specify the professional category involved in the incident, and in some of them there is conflicting information, sometimes it is a nurse or sometimes a nursing technician.

Regarding the types of errors reported, errors related to drug administration prevailed, with emphasis on the exchange of substances and the exchange of routes involving the patient's diet. In Brazil, 26 reports of errors of this type were published in the period, and no errors of this kind were reported in Portugal. However, in Portugal, the type of error that predominated is related to the wrong programming of the phototherapy device, which is justified by the fact that it had great repercussion in that country, which resulted in a larger number of reports that portrayed the occurrence.

Some of the errors related to the technique used in the procedures are not explicit in the reports, and when identified, are linked to the verb "to forget". Other errors reported less frequently have been described in the news as related to some kind of negligence on the part of professionals, whether in the identification of the patient, changes, omissions and accidental injuries.

The outcomes resulting from the errors portrayed in the news stories are shown in the figure below, with emphasis on the death of the patients involved. The news of patient death predominated in both countries. The following is the news regarding the worsening of health status and the increase in length of stay. The word "death" tends to be highlighted in the same way as the term child, as a strategy to draw attention.

The causes of the errors reported by the newspapers were also exposed in most of the reports, however, these were analyzed, forming a category that was called "possible attributed causes", to identify the news, which does not necessarily correspond to the real causes of these incidents. When it comes to errors of this nature, the causes can be multiple and indeterminate, which requires a thorough analysis of events. And, undoubtedly, this was not done in the reports analyzed. What we care to understand here are the possible causes that may be related to the incidents and how they were exposed by the media, as shown in the following figure.

The possible causes attributed in the news are related to the management of health work, as well as to the organization of services, since it is effectively the training for work, the deficit of the workforce with consequent overload and the absence of supervision, as highlighted in the following sections:

The hospital's risk management team and neonatal death committee are already evaluating all methods in the industry,

including patient care processes. However, the work overload due to the lack of nurses, as evaluated by the president of the Regional Nursing Council [state regarding the news], had already been noticed in the sector. (NBS1)

A newly hired nursing assistant found perfluorocarbon in a drawer and prepared it as if it were serum. (NBSD2)

The delegate promised to also hear the direction of the hospital to find out why there was not a nurse on-duty. (NBND3)

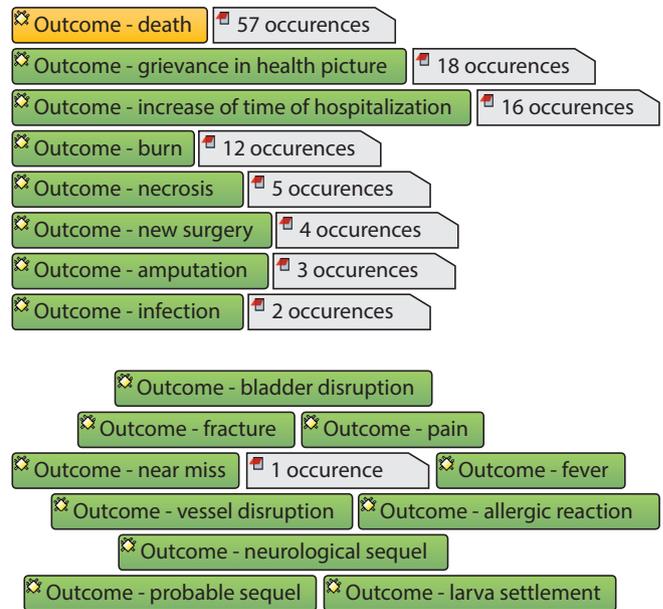


Figure 4 - Outcomes of the errors according to the news published in the two countries

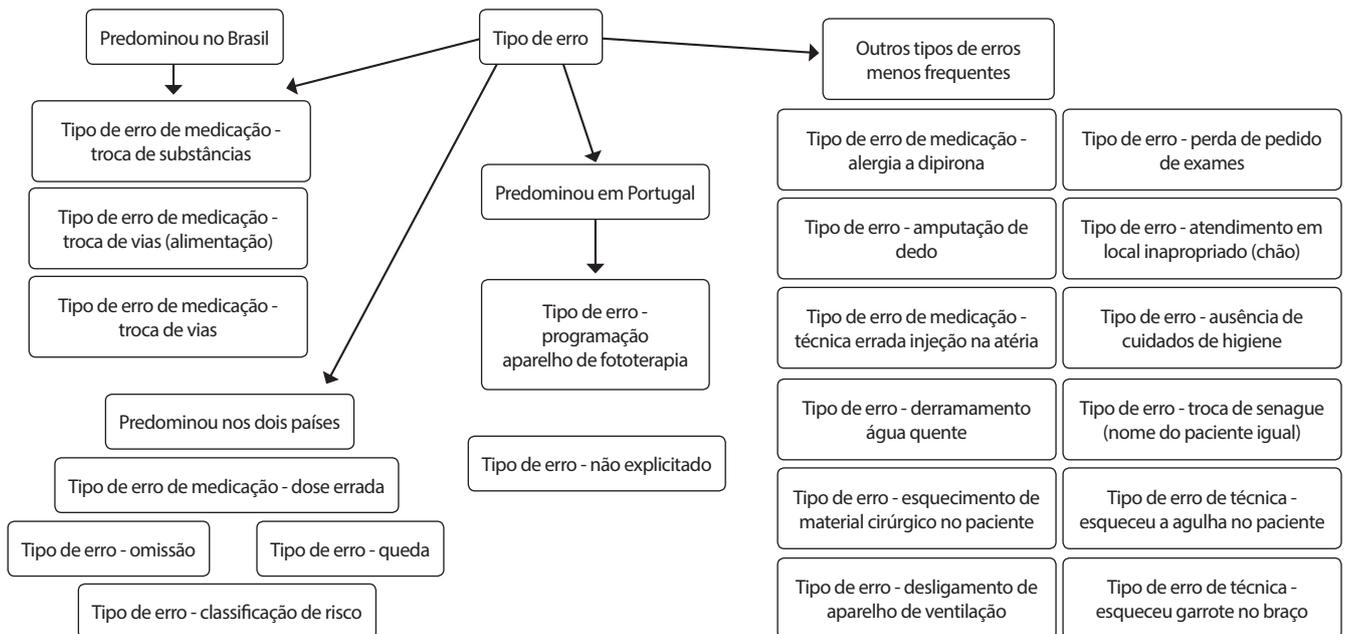


Figure 3 - Types of errors identified in the reports

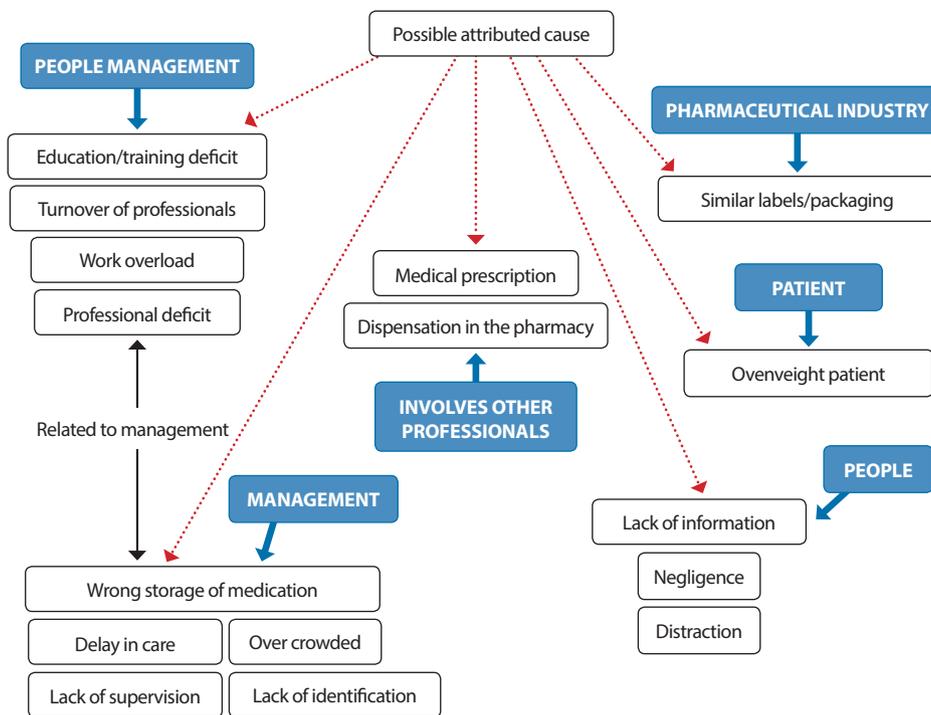


Figure 5 - Possible causes attributed by the media to the errors portrayed

DISCUSSION

Every year society is faced with a series of news that targets the mistakes of health professionals, especially nursing professionals. These reports were more present in Brazil in the year 2012, which may be justified by the cases that had greater national repercussion, such as the administration of glycerin in a patient's vein and feeding in a child's vein. The patients in question died and the cases were continuously recalled that year and aroused great national commotion. It should be remembered that from the new guidelines implemented throughout the country by the National Patient Safety Policy (*Política Nacional de Segurança do Paciente*) in 2013, there was a significant reduction in reported cases.

In contrast to what happened in Portugal, since the year with the highest number of reported cases was 2016. This increase occurred even after the implementation of the National Health Plan 2011-2016, which stipulated quality standards with a view to improving health care⁽¹¹⁾, and updating the *Padrões de Qualidade dos Cuidados de Enfermagem* (Nursing Care Quality Standards), carried out in 2012, by the Brazilian Order of Nurses. The largest number of incidents in 2016 shows that even under the policies mentioned, these incidents continue to be reported. Here we can think of two explanations: the continuity of the increase of events, thus counteracting the world order to reduce these incidents; or the repercussion that the same fact can generate.

In both countries, the age group most affected by the errors was the children's audience. This result is seen in other studies. A Brazilian study evidenced in its sample the incidence of 84% of adverse events during hospitalization in the Neonatal ICU⁽¹²⁾. It is worth mentioning that in relation to errors in Neonatal ICU, many are still underreported⁽¹³⁾. It is also worth noting that children present greater vulnerability to adults, mainly due to the anatomy and

physiology in formation and the use of off label, which is closely related to drug interactions, as well as the absence of specific drugs for the children's audience⁽¹⁴⁾. And whenever the reported death refers to children, it becomes a target of commotion on the part of society, because it is contrary to the life cycle. In this way, the media tends to take information partially to society, and may lead to the perception that children are always at greater risk in health care.

In the same way that children excelled in the news, nurses also played a prominent role in the reported errors. This is due to two main reasons. In one of the countries surveyed there is no division in the professional category, and therefore the news that made up the sample from Portugal always deals with nurses. Moreover, in the Brazilian case, the news tends to identify all nursing professionals by

nurses, not doing (perhaps because they do not know) this distinction.

The errors related to medication administration had a greater emphasis in this study, as well as in many other previous ones that dealt with health care errors, but used different forms of data collection, that is, they were not studies about the media coverage of errors that involved nursing professionals⁽¹⁵⁻¹⁹⁾. The focus is on this study, especially for the exchange of substances at the time of administration of drugs and for the administration of diet in the circulatory system through venous access. In Brazil, the news regarding these errors was related to the deaths and the very serious sequels resulting from these errors. These situations had a strong impact on the media. The mistaken programming of a phototherapy device by a Portuguese nurse was highlighted in this study, since the fact was reported six times with different approaches, but in all of them, it was considered the penalization of the professional.

When the errors are linked to the techniques used in the procedures, they did not appear explicitly in the text of the reports, that is, what happened to result in the incident was not described, leaving a gap for interpretations. Other types of errors, however less frequent, were described as nursing professionals' negligence. However, the cause may have been the result of a complex process, which has been identified in other studies, such as those reporting changes in blood bags due to problems in identifying the patient⁽²⁰⁻²¹⁾ and treating falls⁽²²⁾.

The outcome that most induces the communication of nursing errors to society is certainly death. News of this nature tends to portray the episode in a way that the reader is attracted to that information, and thus, for marketing/viewing purposes, the media uses persuasive techniques to impress and nurture emotions in people^(5,23). For that, in the texts studied, the association of images (wake, relatives of crying victims, photo of tombs and stretchers) and titles in augmented and highlighted letters

stood out, highlighting the term “death”. This association may suggest negative interpretations and too precipitous judgments, even with enlightening and comprehensive content⁽²³⁾, because language is action and by communication people interact with the environment and with society⁽⁷⁾.

The main causes attributed to nursing errors refer to working conditions, such as work overload, turnover and the deficit of nursing personnel; and the processes of management and organization of nursing care. This is not a recent finding, since the discussion about the influence of workloads of health professionals on safety and quality of care is very recurrent. Work is a transformative action, however, much more significant than understanding/describing “what is done”, it is necessary to understand how it is done and under what working conditions and relations⁽⁶⁾. Results from a systematic review showed that nursing staff workloads directly influence the occurrence of adverse events⁽²⁴⁾ and, consequently, impact on quality of care increasing mortality, hospitalization time and costs of health care^(12,24-25).

Some of the causes portrayed in the newspaper texts evidenced the participation of other health professionals involved in the care, regarding the medical prescription, which corroborates with other studies, noting that errors in medical prescription may trigger other errors during the process of medication^(3,26-29). The most common prescription-related errors involve drug doses and the frequency of administration⁽³⁰⁾. However, the focus of the news falls on nursing professionals.

The pharmaceutical industry also appears as the focus of problems associated with drugs and devices that induce health care failures. They are related to this, mainly, the similarity of name, labels, packaging and the design of some devices^(26,31-32). These similarities, along with other causes, such as work overload, overcrowding and problems in the organization of health services, can decisively interfere with the occurrence of errors considered serious, such as the exchange of substances and the administration of the diet in the venous access of the patient.

Differently from what is described in the media, distractions and neglects of nursing professionals are issues that involve complex causality and have an ethical dimension, which is repeatedly taken as a priority in discussions that deal with safer care⁽³³⁾. Distraction, in particular, is a common cause, with unfavorable results in health work^(17,19).

It is important to note that, unlike scientific studies on this subject, the news in the newspapers studied do not at any time bring information that improves the understanding of the phenomenon of error, unless it encourages readers to reflect on the improvement of the and all aspects of these improvements.

Study limitations

The limitations are related to the data collection, since the media was written in newspapers and, also, by the incipience

of studies of this nature that could contribute in the discussion of the findings.

Contributions to the sectors of Nursing, Health or Public Policy

The results of the study show that nursing professionals, especially their representative organizations, need to be attentive to what the media expose regarding the negative results of nursing care, in order to intervene, in order to contribute to the communicative dialogue with society about the complexity of the causality of errors involving nursing professionals.

The exposition of nursing errors in the newspapers showed that this problem is still a great challenge for Nursing, because the occurrence of these incidents continues to alarm society and expose the profession in a negative way. Unlike other services, such as aviation, which treat accidents in the form of risk management, which favors media communication to provide real information about the investigation of the facts without immediately blaming the workforce involved. The results of the research contribute to a better understanding of the nursing-society relationship and can encourage positive actions towards the valorization of the profession, institutional accountability and education with a view to the quality and safety of nursing care.

FINAL CONSIDERATIONS

The importance of this study is to highlight the visibility of the problem in order to highlight its complexity and the strategies to prevent future errors in care and, consequently, unfavorable outcomes for patients and families. Such visibility must never go to the negative side of interpretation, or at least punitive, since professionals as well as problems with patient safety must be understood in their complexity. Portraying episodes in a commercial way, fostering emotions in readers is by no means an alternative to promoting best practices in nursing.

Therefore, it is necessary to think about improving the training of future professionals and the training/education for work, with scientific development; improve working conditions such as work hours and workforce deficits, as well as the conditions associated with the management of health services, which in some cases are related to the political development of nursing professionals, who are struggling for better working conditions with a view to ensuring safe and quality care.

FUNDING

This study is funded by the National Council for Scientific and Technological Development (CNPq) through a “sandwich” doctorate scholarship.

REFERENCES

1. Ministério da Saúde (BR), Fundação Oswaldo Cruz (FIOCRUZ), Agência Nacional de Vigilância Sanitária (ANVISA). Documento de referência para o Programa Nacional de Segurança do Paciente [Internet]. Brasília (DF): Ministério da Saúde; 2014 [cited 2018 Sep 08]. 42 p. Available from: http://bvsm.sau.gov.br/bvs/publicacoes/documento_referencia_programa_nacional_seguranca.pdf

2. Conceptual framework for the international Classification for Patient Safety- version 1.1 [Internet]. Geneva: World Health Organization; c2009 [cited 2017 May 29]. 154 p. Available from: http://www.who.int/patientsafety/implementation/taxonomy/icps_technical_report_en.pdf
3. Forte ECN, Pires DEP, Padilha MICS, Martins MMFPS. Nursing errors: a study of the current literature. *Texto Contexto-Enferm*. [Internet] 2017 [cited 2017 Jun 26];26(2):e01400016. Available from: <http://dx.doi.org/10.1590/0104-07072017001400016>. English, Portuguese.
4. Oliveira AC, Garcia PC, Nogueira LS. Nursing workload and occurrence of adverse events in intensive care: a systematic review. *Rev Esc Enferm USP* [Internet]. 2016 [cited 2017 May 20];50(4):683-94. Available from: <http://dx.doi.org/10.1590/S0080-623420160000500020>. English, Portuguese.
5. Forte ECN, Pires DEP, Martins MMFPS. Eventos adversos com medicação: a culpabilidade impressa pela mídia. *Millenium*. 2016;2:277-84.
6. Marx K. *O capital*. 7 ed. resumida. Rio de Janeiro: Zahar editores; 1982. 396 p.
7. Habermas J. *Teoria do Agir Comunicativo 1: racionalidade da ação e racionalidade social*. São Paulo: WMF Martins Fontes; 2012. 730 p.
8. Nitahara A. Brasil ocupa posição 103 no ranking de liberdade de imprensa. [Internet]. Brasília: Agência Brasil; 2017 Mar 26 [cited 2017 Jun 13]. Available from: <http://agenciabrasil.ebc.com.br/geral/noticia/2017-04/brasil-ocupa-posicao-103-no-ranking-de-liberdade-de-imprensa>
9. Repórteres sem Fronteiras. *Ranking Mundial da Liberdade de Imprensa 2017: a grande virada*. [Internet]. [place unknown]: Repórteres sem Fronteiras; c2016 [cited 2017 Jun 13]. Available from: <https://rsf.org/pt/ranking-mundial-da-liberdade-de-imprensa-2017-grande-virada>
10. Ricoeur P. *Teoria da interpretação: o discurso e o excesso de significação*. Lisboa: Edições 70; 2016. 136 p.
11. Martins MMFPS, Gonçalves MNC, Ribeiro OMPL, Tronchin DMR. Quality of nursing care: instrument development and validation. *Rev Bras Enferm* [Internet]. 2016;69(5):864-70. Available from: <http://dx.doi.org/10.1590/0034-7167-2015-0151>. English, Portuguese.
12. Ventura CMU, Alves JGB, Meneses JA. [Adverse events in a Neonatal Intensive Care Unit]. *Rev Bras Enferm* [Internet]. 2012 [cited 2017 Jun 09];65(1):49-55. Available from: <http://dx.doi.org/10.1590/S0034-71672012000100007>. Portuguese.
13. Sousa BVN, Santana RR, Santos MS, Cipriano ESV, Brito CO, Oliveira EF. Reconsidering patient safety at neonatal intensive care units: systematic review. *Cogitare Enferm* [Internet]. 2016 [cited 2017 Jun 09];21(Esp):1-10. Available from: https://revistas.ufpr.br/cogitare/article/view/45576/pdf_1
14. Martins TSS, Silvino ZR, Silva LR. Adverse events in pediatric pharmacotherapy: integrative literature review. *Rev Bras Enferm* [Internet]. 2011 [cited 2016 Jul 15];64(4):745-50. Available from: <http://dx.doi.org/10.1590/S0034-71672011000400018>. English, Portuguese.
15. Fontana RT, Wolf J, Rodrigues FCP, Castro LM. Analysis of written media on adverse events occurring in practice nursing. *Rev Enferm UFPE Online*. [Internet] 2015; 9(4): 8103-10. [cited 2016 Jul 13]. Available from: <http://dx/10.5205/reuol.6235-53495-1-RV.0904supl201516>
16. Yamamoto MS, Peterlini MAS, Bohomol E. Spontaneous reporting of medication errors in pediatric university hospital. *Acta Paul Enferm* [Internet]. 2011 [cited 2017 Jun 26];24(6):766-71. Available from: <http://dx.doi.org/10.1590/S0103-21002011000600006>. English, Portuguese.
17. Shahrokhi A, Ebrahimpour F, Ghodousi A. Factors effective on medication errors: a nursing view. *J Res Pharm Pract*. 2013 2(1):18-23.
18. Valentin A, Schiffinger M, Steyrer J, Huber C, Strunk G. Safety climate reduces medication and dislodgement errors in routine intensive care practice. *Intensive Care Med*. 2013;39: 391-8.
19. Marquet K, Claes N, De Troy E, Kox G, Droogmans M, Schrooten W, et al One fourth of unplanned transfers to a higher level of care are associated with a highly preventable adverse event: a patient record review in six belgian hospitals. *Crit Care Med*. 2015;43(5):1053-61.
20. Gomes ATL, Assis IMS, Silva MF, Costa IKF, Feijão AR, Santos VEP. Medication administration erros: evidence and implications for patient safety. *Cogitare Enferm*. 2016; [cited 2016 Jul 15];21(3):1-11. Available from: <http://revistas.ufpr.br/cogitare/article/view/44472/pdf>. English, Portuguese.
21. Silva JA, Pinto FCM. [Assessing the impact of Patient Safety strategy implemented in a Clinical Unit of a University Hospital under the Perspective of Health Care Dimension]. *Rev Adm Saúde* [Internet] 2017 Jan/Mar; [cited 2016 Jul 15];17(66): [about 15 p.]. Available from: <http://cqh.org.br/ojs-2.4.8/index.php/ras/article/view/10/19>. Portuguese.
22. Luzia MF, Almeida MA, Lucena AF. Nursing care mapping for patients at risk of falls in the Nursing Interventions Classification. *Rev Esc Enferm USP* [Internet]. 2014 Ago [cited 2015 Jul 2015];48(4):632-40. Available from <http://dx.doi.org/10.1590/S0080-623420140000400009>. English, Portuguese.
23. Maia LP. *A influência da mídia impressa no imaginário coletivo sobre os serviços de saúde: o exemplo das emergências públicas de Porto Alegre* [Monography on the Internet]. Porto Alegre (RS): Universidade Federal do Rio Grande do Sul, Escola de Enfermagem, Curso de Análise de Políticas e Sistemas de Saúde; 2013 [cited 2018 Sep 08]. 27 p. Available from: <http://hdl.handle.net/10183/77162>
24. Carlesi KC, Padilha KG, Toffoletto MC, Henriquez-Roldán C, Juan MAC. Patient Safety Incidents and Nursing Workload. *Rev Lat Am Enfermagem* [Internet]. 2017 [cited 2017 May 26];25:e2841. Available from: <http://dx.doi.org/10.1590/1518-8345.1280.2841>. English, Portuguese, Spanish.
25. Hartnell N, MacKinnon N, Sketris I, Fleming M. Identifying, understanding and overcoming barriers to medication error reporting in hospitals: a focus group study. *Worldviews Evid Based Nurs* [Internet]. 2013 [cited 2017 Jun 17];10(2):82-94. Available from: <http://dx.doi.org/10.1136/bmjqs-2011-000299>
26. Keers RN, Williams SD, Cooke J, Ashcroft DM. Causes of medication administration errors in hospitals: a systematic review of quantitative

- and qualitative evidence. *Drug Saf [Internet]* 2013; [cited 2015 Jul 13];36(11). Available from: <https://dx.doi.org/10.1007/s40264-013-0090-2>
27. Teixeira TCA, Cassiani SHB. Root cause analysis of falling accidents and medication errors in hospital. *Acta Paul Enferm.* 2014;27(2):100-7.
 28. Pichler RF, Garcia LJ, Seitz EM, Merino GSAD, Gontijo LA, Merin EAD. [Medication errors: ergonomic analysis of the utensils in the medication living in the hospital environment]. *Cad Saúde Colet.* 2014; 22(4):365-71. Portuguese.
 29. Lopes DMA, Néri EDR, Madeira LS, Souza Neto PJ, Lélis ARA, de Souza TR, et al. [Analysis of similar drug labeling: potential medication erros]. *Rev Assoc Med Bras [Internet]* 2012 [cited 2015 Aug 02];58(1):95-103. Available from: <http://dx.doi.org/10.1590/S0104-42302012000100021>. Portuguese.
 30. Alsulami Z, Conroy S, Choonara I. Medication errors in the Middle East countries: a systematic review of the literature. *Eur J Clin Pharmacol [Internet]* 2013 [cited 2016 Jun 12];69(4). Disponível: <https://dx.doi.org/10.1007/s00228-012-1435-y>
 31. Harada MJCS, Chanes DC, Kusahara DM, Pedreira MLG. Safety in medication administration in pediatrics. *Acta Paul Enferm.* 2012; 25(4):639-42.
 32. Silva AEBC, Laselva CR, Carrara D, Perini E, Pinto GRS, Sousa MRG, et al. Erros de conexão: práticas seguras e riscos na administração de soluções por sondas enterais e cateteres vasculares. *Bol ISMP [Internet]* 2013 Mar. [cited 2016 Nov 11];2(3):1-4. Available from: <http://www.ismp-brasil.org/site/wp-content/uploads/2015/07/V2N3.pdf>
 33. Oliveira RM, Leitão IMTA, Silva LMS, Figueiredo SV, Sampaio RL, Gondim MM. Strategies for promoting patient safety: from the identification of the risks to the evidence-based practices. *Esc Anna Nery [Internet]*. 2014 Mar [cited 2017 Jun 13];18(1):122-9. Available from: <http://dx.doi.org/10.5935/1414-8145.20140018>. English, Portuguese.
-