



## Knowledge of nursing professionals about the risk management process

*Conhecimento dos profissionais de enfermagem sobre o processo de gerenciamento de riscos**Conocimiento de los profesionales de enfermería sobre el proceso de gestión de riesgos*Lucilene da Silva Silva<sup>1</sup>, Nathanielle Leite Resende<sup>2</sup>, Carolinne Kilcia Carvalho Sena Damasceno<sup>2</sup>, Cristina Maria Miranda de Sousa<sup>3</sup>

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**ABSTRACT**

**Objective:** To analyze the knowledge of nursing professionals about the Risk Management Process. **Method:** qualitative study conducted in a public maternity hospital. Data collection took place in June 2018 and was conducted through a semi-structured interview with the participation of 12 nursing professionals. Data were analyzed with the support of IRAMUTEQ Software. **Results:** the participants knew about risk management, but it was observed difficulties to conceptualize this process and when the actions taken in relation to the identification of a risk situation, they reported that they would trigger the patient's Safety Center, provide immediate assistance, would communicate the doctor/nurse and inform the institution's management through the ombudsman. **Final Considerations:** Knowledge about risk management is a theme that is far from the reality of some professionals, so it is necessary to improve the disclosure about what is risk management.

**Descriptors:** Risk Management; Patient Safety; Nursing Care.

**RESUMO**

**Objetivo:** analisar o conhecimento dos profissionais de enfermagem sobre o Processo de Gestão de Riscos. **Método:** estudo qualitativo realizado em uma maternidade pública. A coleta de dados ocorreu em junho de 2018 e procedeu-se por meio de uma entrevista semiestruturada com a participação de 12 profissionais de enfermagem. Os dados foram analisados com o suporte do Software IRAMUTEQ. **Resultados:** os participantes conheciam sobre gerenciamento de risco, porém foi observado dificuldades para a conceituação deste processo e quanto as ações tomadas diante da identificação de uma situação de risco, os mesmos relataram que acionariam o Núcleo de Segurança do paciente, prestariam assistência imediata, comunicariam o médico/enfermeiro e informariam a gerência da instituição por meio da ouvidoria. **Considerações Finais:** O conhecimento sobre gerenciamento de risco é uma temática que se encontra distante da realidade de alguns profissionais, por isso é necessário melhorar a divulgação sobre o que se trata a gestão de riscos.

**Descritores:** Gestão de Risco; Segurança do Paciente; Cuidados de Enfermagem.

**RESUMÉN**

**Objetivo:** analizar el conocimiento de los profesionales de enfermería sobre el proceso de gestión de riesgos. **Método:** estudio cualitativo realizado en una maternidad pública. La recopilación de datos tuvo lugar en junio de 2018 y se realizó a través de una entrevista semiestructurada con la participación de 12 profesionales de enfermería. Los datos fueron analizados con el apoyo del software IRAMUTEQ. **Resultados:** los participantes sabían sobre la gestión de riesgos, pero se observaron dificultades para conceptualizar este proceso y cuando las acciones tomadas en relación con la identificación de una situación de riesgo, informaron que activarían el Centro de Seguridad del paciente, proporcionarían asistencia inmediata, se comunicarían médico/enfermera e informar a la gerencia de la institución a través del defensor del pueblo. **Consideraciones finales:** El conocimiento sobre la gestión de riesgos es un tema que está lejos de la realidad de algunos profesionales, por lo que es necesario mejorar la divulgación sobre lo que es la gestión de riesgos.

**Descritores:** Gestión de Riesgos; Seguridad del Paciente; Atención de Enfermería.

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## INTRODUCTION

Patient safety is an extremely important topic, as through many issues involving this theme, initiatives have been taken to raise awareness among healthcare professionals about providing safe and quality care.<sup>1</sup>

Thus, in 2013 was published Resolution of Collegiate Board No. 36, which provides for patient safety actions in health facilities, and among the various terms contained in it stands out Risk Management.<sup>2</sup>

This risk management is directly associated with health care, as it is an important tool in the early detection of situations that pose risks to the patient's health, as well as helping to resolve these issues and prevent further occurrences.<sup>3</sup>

In order to prevent incidents, it is necessary to identify risks, which is the first step of the Risk Assessment Process, which is characterized as a way of recognizing risks and seeking ways in the institution to solve them. Therefore, risk identification encompasses the identification of causes and sources of risk.<sup>4</sup>

It is important to highlight the existence of the Patient Safety Plan, which is a document prepared and updated by the Patient Safety Center, based on integrated risk management and prevention action strategies, which seeks to control and reduce risks to patients, caregivers and service workers. Thus, it is necessary that professionals are able to recognize the situations that contribute to the emergence of risks and the risks already present, so that they participate in the construction of patient safety resolution tools.<sup>1</sup>

Given this context, the question is: What do professionals know about risk management and

what actions would they take if they identified a risk situation? Thus, the study aims to identify the risk management process in patient safety.

The objective of this study was to analyze the knowledge of nursing professionals about the Risk Management Process and the specific objectives were to characterize the profile of the study participants regarding the variables: age, length of service, education, training and work shift and to know the use of the risk management process identification step by nursing professionals.

## METHODS

This is a study with a qualitative approach, this type of approach is chosen in order to understand the opinion of an individual or collective being, about a certain theme that is part of their reality.<sup>5</sup>

The present study was conducted in a public maternity hospital of reference for high complexity in the municipality of Teresina-PI. In addition to all the services offered to the community, this maternity ward is an internship field of the Higher Education Institutions of the municipality, for both undergraduate and graduate students.

Data collection was designed with 20 participants, but there was readjustment of the amount due to saturation of responses, so the final total was 12 participants, and their statements were identified as the collaborative name followed by cardinal numbering. Inclusion criteria were: being a nursing professional who has worked for more than 1 year in the institution and were excluded from the research

professionals on legal leave (vacation, sick leave or maternity) or time off during data collection.

The data collection took place in June 2018, through the use of the data collection instrument, the semi-structured interview, with structural and knowledge questions. Thus, the audio recorder and personal notebooks were used for annotation were transcribed and analyzed.

These data were analyzed with the support of the IRAMUTEQ Software (Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires), which among the five different types of analysis were adopted, which were: descending hierarchical classification, similarity analysis and word cloud.<sup>6</sup>

Descending Hierarchical Classification (CHD) qualifies text segments according to their use in their vocabularies, and lexicographically analyzes the text and provides categorization into word classes, and each word class has a different color.<sup>7-8</sup>

Concerning the similarity analysis, it is based on the theory of graphs that allows to identify the cooccurrences between words and outcome, indicating the connection between words, which facilitates the identification of the textual corpus structure, due to this type of analysis, it constitutes a mathematical example in the study of the relations between discrete objects.<sup>9</sup>

In lexical analysis (word cloud), the vocabulary is characterized and quantified according to the frequency of the words, that is, it is possible to perform statistical calculations on qualitative data, which allows the researcher

to interpret later. Therefore, this kind of analysis support differs from content analysis, in which there is first interpretation and only then systematization.<sup>6</sup>

This study complied with Resolution 466/2012 of the National Health Council, which deals with research with human beings. Thus, the Informed Consent Form was delivered and explained to each participant, and only after the signature and the indication by the professional of the most viable day for collection, that it was started.

The research risks were minimal, such as embarrassment during the interview or insecurity regarding the confidentiality of the answers provided and to minimize them the researchers committed to maintain ethics at all times of the study development.

This research was approved by the Research Ethics Committee of the UNINOVAFAP University Center, under CAEE 80095617.2.0000.5210 and Opinion Number 2,409,549.

## RESULTS AND DISCUSSION

As for the sociodemographic characteristics of the 12 participants interviewed, 90.9% were female, the age group was between 25-56 years, regarding professional category, 50% of the participants were nurses and the other half were nursing technicians and Operating time in the area ranged from 1-30 years. Regarding education, one participant had only high school, most participants had beyond the undergraduate, a lato sensu postgraduate,

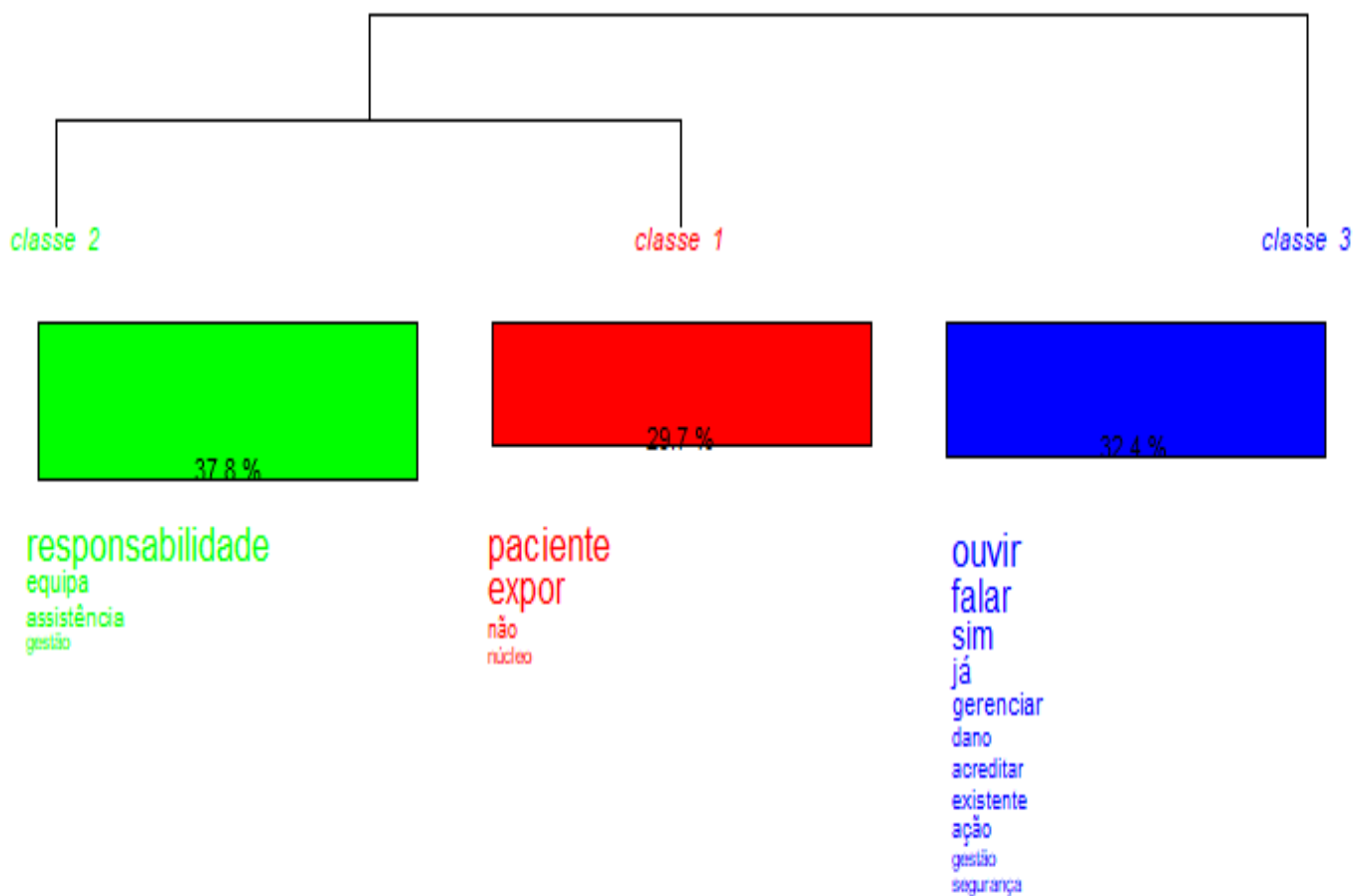
and all participated in training in the last 6 months.

**Dendrogram of Reinert Method Classification**

The Reinert Method Classification Dendrogram looks for classes from words that are significantly associated. The reading is performed from top to bottom, thus it is observed that the Corpus was presented in two

subgroups, the upper subgroup was presented in one group (resulting class 3) and the lower subgroup was divided in two (resulting class 1 and 2). It appears that class 3 has little relationship with classes 1 and 2, but it is clear that class 1 has more proximity to class 2.

**Figure 01:** Reinert Method Classification Dendrogram



Note: The words of the dendrogram and word clouds were kept in the original language to meet the specifics of the software and the adopted method.

**Word cloud**

Word Cloud processing exposes a group of grouped words, with a larger font display to those that had a high importance in the textual

corpus, thus we verified that the word risk was the one that had the most frequency in the corpus - 34 times, followed by the word patient - 27 times (Figure 02).

Figure 02: Word cloud



Note: The words of the dendrogram and word clouds were kept in the original language to meet the specifics of the software and the adopted method.

When we questioned the professionals if they knew about Risk Management, four participants stated that they had never heard about this subject, but all gave their opinion about what they thought it was. The other participants knew about risk management and knew how to define, despite difficulties to conceptualize, but all brought a correct direction, as noted below:

*“It is to manage the various risks in the environment, and various methods can be devised to avoid them and not put the integrity of the patient at risk.”*  
(Collaborator 04)

*“Risk management is to identify patient-related adverse damage.”* (Collaborator 07)

*“I believe it is anticipating future harmful occurrences to patients.”*  
(Collaborator 08)

It is possible to identify in other studies the lack of knowledge or superficial knowledge by health professionals regarding the issues involving patient safety, this may be related to the lack of effective dissemination of these themes or the professional does not fully adhere to the strategies that aim at patient safety.<sup>10</sup>

After the processing steps performed by the software, the speeches of the participants in the speeches were interpreted, only for the purposes of this study, to verify the meaning of the words used.

Thus, when asked what would be their attitude towards a risk-prone/risk-exposed patient, it was noticeable the strong link between the word risk and responsibility, as shown in the following statements:

*“In case of the patient be exposed to health risks I would contact the patient safety center to take action.”*  
(Collaborator 01)

In this speech it is clear that the first option of the professional would be to contact the patient's Safety Center. And this contact is related to triggering the Center to assess the situation through appropriate risk management tools, to know which factors contributed to the occurrence of the incident.

Following are the other statements that describe the participants' actions towards a patient exposed to risks:

*“Faced with a patient exposed to risk, immediately resolve the current situation, then seek solutions from the responsible nucleus.”* (Collaborator 03)

*“In identifying risks to the patient, I would correct the risks by communicating to the appropriate authorities, such as the nurse in charge of the duty and would inform the ombudsman so that the*

*appropriate solutions could be taken so that the institution knows what happens here and comes to take it more preventive than corrective attitudes, do not expect the patient to fall into the ward due to a trickle of water, but perform maintenance as soon as possible.”* (Collaborator 06)

*“In cases of risk situations, I would try to provide a solution to the problem.”*  
(Collaborator 08)

*“In verifying a patient exposed to risks, would act immediately to end the danger.”* (Collaborator 09)

It was observed in some statements the lack of consistency and a generalization in the attitudes taken in relation to risk identification, which leads to highlight that it is necessary to work intensively with these professionals the theme of risk management, paying attention to the identification stage to be able to recognize situations that undermine the health integrity of patients.

In a qualitative study conducted in Iran, it was noted in the participants' statements that the increased incidence of incidents in patients and professionals was related to material scarcity, poor professional competence, weakened team empowerment and inadequate working conditions, which resulted in a barrier to implementing the effective safety culture.<sup>11</sup> In daily life, the risk management process is present in the activities of nurses and their staff, as they spend most of their time close to

the patient performing various daily activities, such as medication administration, counseling, dressing, bladder and enteral probing, among others, but to do so, the entire nursing staff must not be negligent, reckless and imperfect in their actions, and proactive in preventing incidents.<sup>12</sup>

When questioning about the responsibility of risk management, it was noticeable in a few excerpts that the responsibility of this management belongs to a particular professional or sector, which highlights the need to work more on this issue with these professionals.

*“I think the risk management responsibility should be with everyone who works there.”* (Collaborator 01)

*“The responsibility is of many people as directors, supervisors, the patient herself, finally involves many managers.”* (Collaborator 02)

*“For me Risk Management is the responsibility of the head nurse of the unit.”* (Collaborator 08)

*“It is the responsibility of everyone on the team, especially nursing.”* (Collaborator 09)

*“Responsibility rests with the entire institution, especially those providing the closest care to patients.”* (Collaborator 10)

*“It is the responsibility of the Patient Safety Nucleus, committees and staff in general that observing hazardous situations should notify.”* (Collaborator 11)

It is important to highlight that it is also the responsibility of the professional who provides direct assistance to perform risk management, with the need to observe the steps of this management, which consists of: Establishing the context; identify the risk; analyze; to evaluate; deal with; communicate and consult; monitor and review.<sup>13</sup>

A point that should be emphasized is that the presence of a culture of guilt and individual punishment after the occurrence of incidents may lead the professional to stop reporting situations that occurred on his duty, sometimes for fear of blame or afraid to create disagreements among coworkers who may have made mistakes. In this way, underreporting leads to a loss of management in knowing the occurrences, and therefore will work to prevent recurrence.<sup>14</sup>

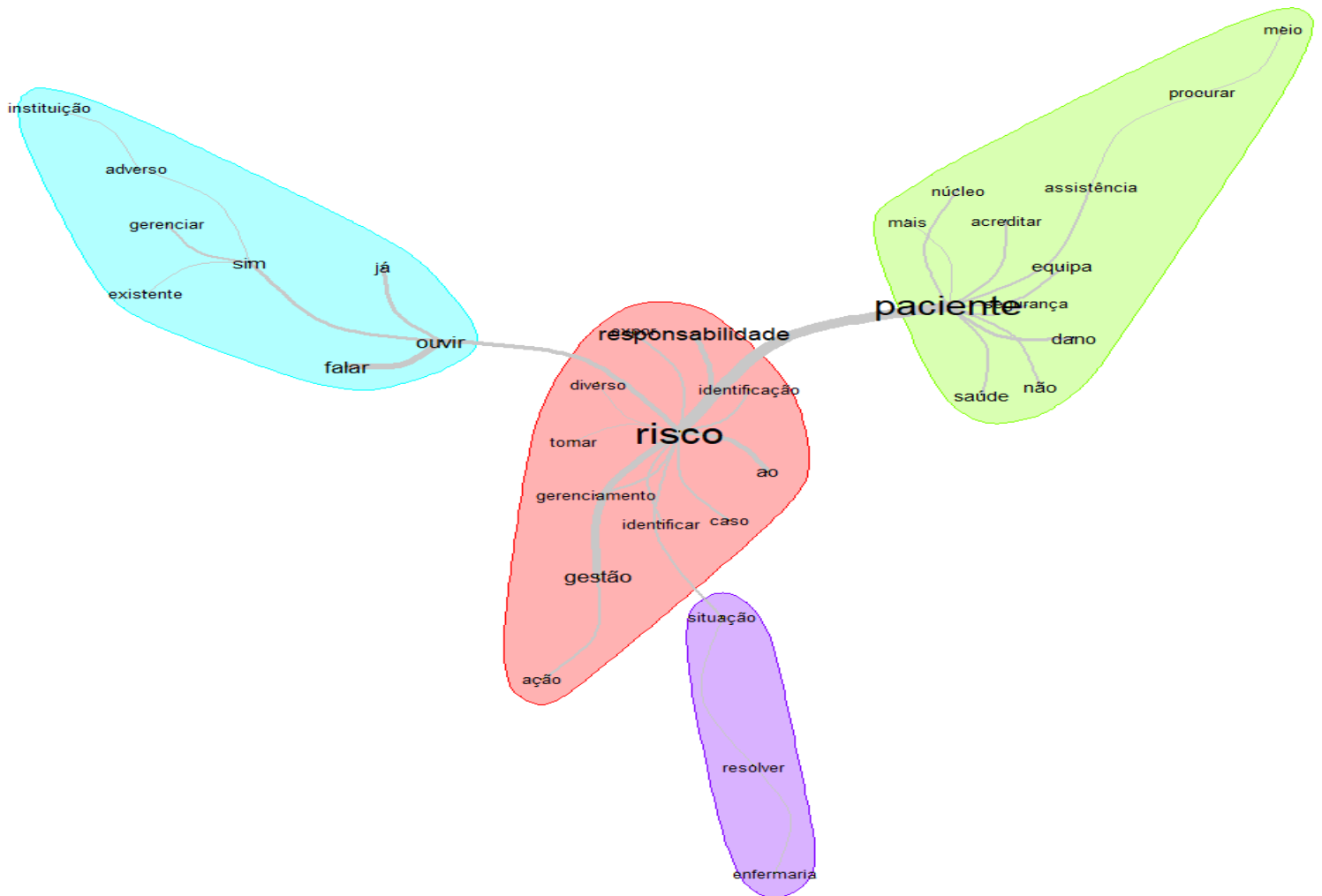
### Similarity Analysis

This analysis is based on the theory of graphs, which studies the object relations of a given group, the formula used is:  $G(V, E)$ , where  $G$  is the graph and is formed by the vertex ( $V$ ) and several links between two vertices ( $E$ ). In this way, it is possible to identify the co-occurrences between the expressions, which makes it possible to identify the connection between them.<sup>15</sup>

From the graphical representation of Figure 03, it is possible to identify the link

between the most frequent words, which were: risk, patient and responsibility.

**Figure 03: Similarity analysis**



Note: The words of the dendrogram, word clouds and similarity analysis were kept in the original language to meet the specifics of the software and the adopted method.

As verified in the Similitude Analysis the correlation of the words shows the strong connection of the words risk, patient and responsibility. Thus, it emphasized the need for all professionals to be able and committed to map the existing physical, chemical, healthcare, clinical and institutional risks or those likely to occur in their work unit, so that advances in the culture of patient safety.<sup>16-17</sup>

Our research presented limitations resulting from the sample size of the participants and the small amount of studies focused on this theme. However, this study contributes to the nursing team, especially those involved in management, to seek ways of raising awareness for the entire team about the importance of risk management in patient safety.



## FINAL CONSIDERATIONS

Given the results of the approach to risk management and its identification stage, it was noticeable that this is a topic that needs to be worked with professionals, especially those who are daily involved in direct patient care, so that they can appropriately manage risk situations and patient safety is preserved as patient safety is impossible without risk management being implemented. Thus, there is a need to improve risk management disclosure to reach everyone.

Thus, it is necessary to intensify the use of means for reporting incidents and adverse events, to know them and thus to seek effective

strategies for correction and prevention of future occurrences.

It is noteworthy that risk management involves several actions, which include preventive, corrective and contingency, so it is essential to carry out permanent and continuing education with health professionals to use the tools of this process and thus result in a strengthened patient safety culture and minimizing incident occurrence.

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### **COLLABORATIONS**

LSS, NLR, CKCSD and CMMS collaborated in the conception or design of the work; in the interpretation of the data; writing of the article or its critical review; in the final version to be published. LSS: Substantial contributions to data collection. All authors agree and are responsible for the content of this version of the manuscript to be published.

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### **CONFLICTS OF INTEREST**

The authors declare that no have conflicts of interest.

### **AVAILABILITY OF DATA**

Available upon request to the authors.

### **FUDING SOURCE**

Does not apply.

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