

**NURSING TEAM SKILLS  
IN RISK MANAGEMENT  
IN HEALTHCARE  
INSTITUTIONS:  
INTEGRATIVE REVIEW**

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**Abstract: Objective:** To identify in the scientific literature the professional competences of the nursing team in risk management in health institutions. **Method:** This is an Integrative Literature Review, with a qualitative approach, with the support of six steps that allows the synthesis of results obtained on a topic through evidence-based practices. **Results:** The research resulted in competencies being: teamwork and collaboration, evidence-based practice, quality improvement, security and informatics. In addition to finding in the studies, the variables of personal satisfaction with the profession, surveillance of the nursing team, leadership, communication and emotional stability. **Final considerations:** The identification of nursing competencies for patient safety, despite enabling their development, is still incipient in the literature with a focus on the nurse's managerial practice. **Keywords:** Patient Safety. Skills. Nursing. Risk management.

## INTRODUCTION

Safe care has been one of the most relevant topics for discussion in the health field. In this scenario, the occurrence of incidents is considered a serious problem related to patient safety and the quality of care provided worldwide.<sup>31</sup>

Patient safety is defined as the reduction, to an acceptable minimum, of the risk of unnecessary harm associated with health care. When there are deficiencies in safety barriers, adverse events, characterized as incidents, which result in harm to the patient occur. This way, patient safety involves a multidisciplinary team, managers and patients in the promotion of comprehensive and safe care.<sup>1</sup>

The World Health Organization (WHO) estimates that about 10% of patients suffer

harm related to hospital care in developed countries. According to data from ANVISA, in Brazil, between June 2019 and May 2020 approximately 150,000 adverse events were reported in NOTIVISA.<sup>two</sup>

The publication of the document "To err is human: building a safer health system" (*ToerrisHuman: building a saferhealth system*), in 1999, by the *Institute of Medicine* (IOM), was a milestone that added concern for patient safety.<sup>1</sup> Still in this context, in 2004, the WHO published a World Alliance Program for Patient Safety and proposed actions with the objective of facing this problem and improving health care practices.<sup>24</sup>

With a view to finding a solution to mitigate or minimize these damages, in Brazil in 2013, the National Patient Safety Program (PNSP) was instituted by Ordinance No. 529/2013.<sup>6</sup> This document proposes measures to prevent and reduce the occurrence of incidents in health services. And in 2013, RDC nº 36/2013 was published, with the objective of instituting actions to promote patient safety and improve the quality of health services.<sup>7</sup>

Health professionals are responsible not only for the act of caring, but for the way it is performed. However, it is known that the process is carried out by human beings who are prone to error. Thus, it is important to have an effective management so that the probabilities of error are reduced to the minimum possible.<sup>22</sup> For this to occur, the risk management process must be carried out, with strategies and initiatives focused on the reduction of adverse events (AE).<sup>17</sup>

Nurses are, in number, the largest workforce of the health team and, therefore, they become fundamental in terms of patient safety and risk management.<sup>27</sup> Thus, it is necessary that these professionals have, in addition to the technical-scientific knowledge, characteristics, skills and

specific competences that involve the stock of resources that the individual holds, considered as inherent to the individual.<sup>18</sup>

Many studies have been carried out addressing patient safety as a central objective. In terms of management, it is important to know what nurses are expected to perform and master, so that the objective of patient safety is achieved. For this reason, the question is what are the nurses' competences in risk management in health institutions?

The present study intends to approach the main characteristics related to the management or management of risks and to discuss the main competences of nurses to perform it.

## METHODS

The present study is an integrative literature review, with a qualitative approach. The integrative review is a method used in evidence-based practice that allows the synthesis of results obtained on a specific topic, since it aims to identify and analyze different sources on the same subject, contributing to its applicability in practice.<sup>3</sup>

From this perspective, this study sought to highlight and discuss the main characteristics on the subject of patient safety, with a greater focus on risk management and necessary skills for nurses, so that care is provided with the lowest incidence of error. possible avoiding harm to patients. For the construction of this research, the six constituent steps of an Integrative Literature Review were adopted.<sup>21</sup>

As an initial step, the identification of the theme and selection of the research question was carried out for the elaboration of the integrative review. The established theme was Competencies of the nursing team in risk management in health institutions and the guiding question: What are the competencies of the nurse in risk management in health institutions?

The second step was to establish the inclusion and exclusion criteria, reported below. The inclusion criteria used for the selection of articles were: all studies available in full, free access, in Portuguese, English or Spanish. Exclusion criteria: studies that did not address competence and risk management. It was decided not to use a temporal cut because the subject in question is still the object of studies and the use of writings is essential to the present day.

The strategy for identifying and selecting the articles was to search the following databases and sources of information: National Library of Medicine (PubMed), Virtual Health Library (BVS), Latin American and Caribbean Literature on Health Sciences (Lilacs), Medical Literature Analysis and Retrieval System Online (MedLine), Portal Capes and Scientific Electronic Library Online (SciELO) between March and May 2020.

The following Health Sciences Descriptors (DeCS) were used for the research: Patient Safety; Risk management; Professional Competence; Nurses and Nurses; Nursing team; and Role of the Nursing Professional. As well as the following *Medical Subject Headings* (MeSH): *Patient Safety; Risk Management; Professional Competence; Nurses; Nursing, Team; and Nurse's Role*. Also, the Boolean operators *AND* and *OR* were used.

After selecting the scientific evidence, in accordance with the recommendations of the *Joanna Briggs Institute* (JBI) for Literature Review, the PRISMA tool (*Preferred reporting items for systematic review and meta-analysis*) was used to guide the research. The PRISMA tool combines several evidence-based items to improve reporting in literature reviews. It consists of a flowchart that provides a checklist for review authors on how to report a review.<sup>4</sup>

For the third step, the information to be extracted from the selected studies was defined,

with their evaluation using an instrument adapted according to the guidelines of the *JBI Reviewer's Manual* (2020)<sup>4</sup>, containing the following information: article title, objective, country and year of publication, methodology and study population, main results and conclusions. The analysis was performed by two reviewers separately, thus adopting the double-independent selection. Results were compared and disagreements were resolved by consensus, with no need for a third reviewer.

The fourth stage, evaluation of the studies included in the review, was characterized by the completion of the article mapping instrument, in order to discuss the best publications and their data, selecting the main results for use in the study. In the fifth stage, the results were interpreted through

the discussion of the articles found and the interpretation of the results obtained. Finally, the sixth stage was carried out, consisting of the analysis and relationship with the literature and the presentation of the review in its entirety.

## RESULTS

The search for articles in the PubMed, VHL, Lilacs, Medline, Portal Capes and SciELO databases resulted in a total of 232 publications. However, only 5 articles were included in this study because they were relevant to this review and contributed to the development of this research. In Figure 1, based on the PRISMA tool<sup>23</sup>, the path taken is described, based on JBI's recommendations for Literature Review.

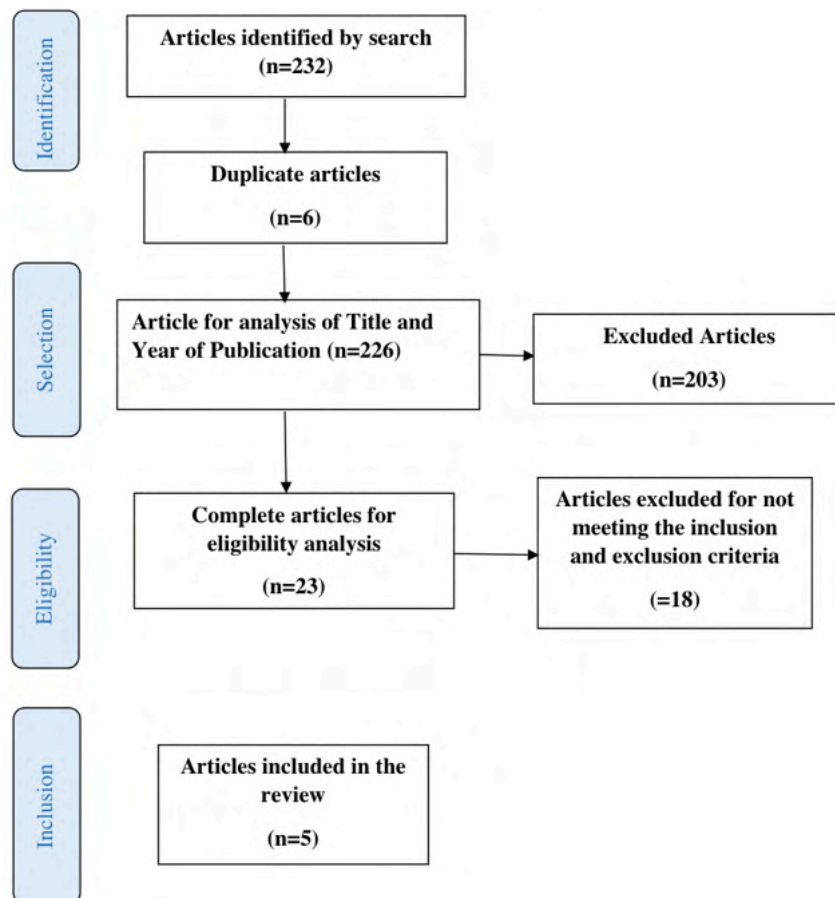


Figure 1 – Process of sorting articles in the databases, adapted from PRISMA.<sup>13</sup> MOHER et al. (2009).

Of the publications found, 221 were excluded because they did not meet the established inclusion criteria. Table 1 shows the results found with the respective descriptors used.

Of the five articles included, one (20%) was selected from the Virtual Health Library (VHL), one (20%) from PUBMED, one (20%) from Latin American and Caribbean Literature on Health Sciences (LILACS) and two (40%) in the Online System of Search and Analysis of Medical Literature (MEDLINE). The articles found in the SCIELO and PORTAL CAPES databases were not included because they did not meet the inclusion criteria.

Table 1 provides information on the five selected articles, as well as the main characteristics.

Of the five articles included, four were published in the US and one in Taiwan. It is evident that there was no national publication. Among the studies, the years of publication were linked to: one (20%) in 2009, one (20%) in 2011, one (20%) in 2012, one (20%) in 2014 and one (20%) in 2017. Regarding the time frame, the articles are considered recent, as they were published between 2009 and 2017.

To assist in classifying the evidence of the selected articles, a table was made with the level of scientific evidence, according to the Oxford Center for Evidence-Based Medicine Classification, as well as their recommendation grade, as shown below (TABLE 2).

The level of evidence and degree of recommendation presented in 80% of the included articles were 4C, respectively, and 20%, 5D.

A table was prepared about the competences addressed in the studies, with the number of articles in which they were cited and the percentage of appearance in those articles, as well as the main characteristics of each competence cited (TABLE 3).

Among the skills highlighted and included in this review, the most cited was teamwork and collaboration, appearing in four (80%) of the articles, three (60%) concerning patient-centered care, evidence-based practice, safety and culture Safety, personal satisfaction with work and nursing education. Quality improvement, informatics and leadership were cited in two (40%) articles, while nursing surveillance, concentration, communication, emotional stability and experience were related to patient safety and risk management in only one article (20%).

## DISCUSSION

After reading the articles, it became clear that the themes of patient safety and risk management are used synonymously in the literature. Thus, and to resolve possible doubts, it is worth noting that such definitions, despite being interconnected, do not correspond to the same concept. Ordinance 529/2013, which establishes the PNSP, states that Patient Safety is related to the reduction, to an acceptable minimum, of the risk of unnecessary harm associated with health care; while risk management would be the systemic and continuous application of initiatives, procedures, conducts and resources in the assessment and control of risks and adverse events that affect safety, human health, professional integrity, the environment and institutional image.<sup>6</sup>

Health care will always involve risks, but these risks can be reduced when they are analyzed and fought, preventing them from being possible causes of adverse events. that causes damage and put patients' health at risk. Despite constant innovations and emerging policies to ensure Patient Safety, the topic still remains an important public health problem.

Risk management is part of the patient safety issue as a practical and systematized

Data base	Total	included	Search strategies
VHL	45	1	(tw:(Professional Competence)) AND (tw:(Nursing Team)) AND (tw:(Patient Safety))
PUBMED	143	1	((“Professional Competence”[Mesh]) AND (“Risk Management”[Mesh]) AND (“Nurses”[Mesh]))
LILACS	5	1	Professional Competence [Words] AND Patient Safety [Words] AND Nursing [Words]
SCIELO	3	0	(Professional Competence) AND (Patient Safety) AND (Nurses) OR (Nurses) OR (Nursing Team)
CAPES	11	0	Professional Competence AND Nursing
MEDLINE	25	two	Professional Competence AND Patient Safety AND Nursing Staff
<b>TOTAL</b>	<b>232</b>	<b>5</b>	

Table 1 – Strategies used in the Databases. Curitiba, Paraná, 2020.

Source: The authors.

Study	Article Title	Purpose of the articles	Year and Country of Publication	Study Methodology
E1	Integrating Quality and Safety Competencies to Improve outcomes	Examine the individual and application of the QSEN competency system and the <i>Infusion Nurses Society Practice Infusion Therapy Standards 2016</i> in improving patient outcomes.	USA, 2017	Case study
E2	A New Mindset for Quality and Safety: The QSEN Competencies Redefines Nurses' Roles in Practice	Provide an overview of the role that quality and safety competencies play in making the health system safer through the Quality and Safety Education for Nurses (QSEN) project.	USA, 2014	Integrative Review
E3	The Role of Nursing Surveillance in Keeping Patients Safe	Present an overview and analysis of nursing surveillance with an emphasis on the definition, characteristics, antecedents and consequences.	USA, 2012	Model case and otherwise
E4	The Role of the Chief Nurse Officer in Ensuring Patient Safety and Quality	Obtain input from organizational leaders and staff on their experiences and structures in support of quality and patient safety initiatives, with particular emphasis on the role and competencies of the Head Nurse.	USA, 2011	Observational, quantitative study, using a questionnaire.
E5	Emotional stability of nurses: impact on patient safety	Examine the influence of nurses' emotional stability in patient safety.	Taiwan, 2009	A cross-sectional design was adopted. Data were collected in 2007-2008, with a response rate of 92.6%.

Table 1 – Mapping of the characteristics of the selected studies. Curitiba, Paraná, 2020.

Source: The authors.

Article	Evidence level	Degree of Recommendation
E1 - Integrating Quality and Safety Competencies to Improve outcomes	4	Ç
E2 - A New Mindset for Quality and Safety: The QSEN Competencies Redefines Nurses' Roles in Practice	5	D
E3 - The Role of Nursing Surveillance in Keeping Patients Safe	4	Ç
E4 - The Role of the Chief Nurse Officer in Ensuring Patient Safety and Quality	4	Ç
E5 - Emotional stability of nurses: impact on patient safety	4	Ç

Table 2 – Level of scientific evidence and degree of recommendation of articles. Curitiba, Paraná, 2020.

Source: The authors.

Theme	Quantity (n)	Percentage (%)	Features
patient centered care	3	60	Patient and family focused care
teamwork and collaboration	4	80	Effective work between nursing and multidisciplinary teams
Evidence-based practice	3	60	Care based on the best current scientific evidence
quality improvement	two	40	Use of resources and methods to improve the quality of care
Safety	3	60	Minimizing the risk of damage
computer	two	40	Use of technologies to provide assistance
safety culture	3	60	Widespread culture among professionals with a view to patient safety
Personal satisfaction with work	3	60	Degree of satisfaction with the work performed
nursing surveillance	1	20	Attention to changes that occur with patients
concentration	1	20	Focus on the care provided
nursing education	3	60	constant specialization
Leadership	two	40	Coordinate the nursing team
communication	1	20	Effective communication to promote a culture of safety
emotional stability	1	20	Psychological aspects influence the care provided
Experience	1	20	Professional knowledge of nurses

Table 3 – Percentage of citation and characteristics of competencies in selected articles. Curitiba, Paraná, 2020.

Source: The authors.

way of supervising adverse events, with the aim of obtaining greater security in the actions performed in the care of the user.<sup>9</sup> The objective of management is to identify, analyze and evaluate risks through available resources and policies, with the objective of reducing the risks arising from the care practice.<sup>7</sup> This way, and for it to be carried out effectively, it is necessary for nursing professionals to propose improvements with a view to promoting safe care in health institutions. Thus, the acquisition of skills related to the management of these services is essential to achieve this objective.<sup>24</sup>

Two analyzed studies addressed the competencies of the Quality and Safety Education for Nursing (QSEN) project, integrating six competencies of the nursing team: patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety and Computing.<sup>28,34</sup> The overall objective of the QSEN project is to prepare future nurses who will have the necessary knowledge, skills and attitudes (CHA) to continually improve the quality and safety of the health systems within which they work.<sup>10</sup>

One can see the influence of a continuous incorporation of technologies in care and globalization, in addition to the need for constant interaction with a multidisciplinary team.<sup>12</sup> In this context of constant changes, managers are required to be able to respond quickly to them. Nurses, as managers of nursing care in their daily practice, require adequate preparation for the current moment.

In three of the nursing studies<sup>28,3,15</sup> is mentioned about patient-centered care as being as a fundamental competence for the nursing team with regard to patient safety. The definition of the patient-centered care competence is arranged in one of the studies as the act of recognizing the patient or the

designated person, as a source of control and partner in the provision of coordinated care and based on respect for the preferences, values and needs of patients.<sup>10</sup>

In line with these studies, the literature demonstrates that when patients and family members are treated as members of the care team, they can become safety allies, helping with information about health status, routine care and usual medications, thus avoiding errors.<sup>34</sup> Also on the use of the Patient and Family Centered Care Model (CCPF). The CCPF is an approach to the planning, delivery and evaluation of health care, based on the partnership of workers, patients and families. As well as the relational practice based on partnership, it maintains the principles of dignity and respect as guides for professional practice, culminating in various actions and strategies for patient safety.

Another related competence was teamwork and collaboration, which deals with effective practice within and interdisciplinary teams, promoting open communication, mutual respect and shared decision-making, in achieving quality nursing care.<sup>10</sup> They are essentials to coordinate complex care involving several health disciplines, since they need interaction for the result to be effective and safe.<sup>34</sup> In addition to being characterized part of a reciprocal relationship, in which communication between professionals is daily exercise of work and allows them to articulate the numerous actions in the team, in the service and in the care network.<sup>19</sup>

One of the studies<sup>10</sup> brought the competence of evidence-based practice (EBP) as a way of integrating the best current evidence with clinical experience, preferences and values of the patient and family in the provision of optimal health care. EBP is a methodology for clinical practice, which consists of the use of scientific evidence, produced by studies



developed with methodological rigor to make decisions about the best conduct in each case.<sup>25</sup> The last decades have been marked by an increase in the production of national scientific research to support EBP and, for this reason, health practices and conducts must be based on the best available evidence. EBP provides greater reliability in the diagnosis and care provided, optimizes the clinical outcome, and leads to greater safety in care.<sup>13</sup>

Necessary facts, the implementation of a safety culture in Health, as health professionals are liable to make mistakes and failures for this to, errors must be treated in a non-individual way, understanding failures as corresponding a complex system, not the professional itself. The purpose of this conception is to encourage nursing professionals to report errors and possible adverse events, focusing on improvements.<sup>20</sup>

Linked to the safety culture is communication, highlighted as a fundamental competence for nurses and cited more frequently<sup>14</sup>. What is in compliance with the researched literature<sup>20</sup>, where communication increases managerial efficiency by understanding the processes it promotes. Therefore, the institution of a safety culture must be permeated through effective communication between professionals, between professionals and superiors and between professionals and patients.

Health surveillance and concentration of the nursing team were competencies that also stood out as interventions to reduce adverse events. Described as necessary in the face of daily actions among nurses, when faced with fundamental decisions that require quick thinking, clinical reasoning, intuition and technical-scientific knowledge for adequate responses to a patient's condition. In this context, frequent interruptions and the need for rapid cognitive change stand out.<sup>15</sup>

The literature corroborates this study, in which clinical decision-making is influenced by the nurse's knowledge and focus of attention. Health institutions constitute an intensive care environment and present numerous barriers to a nurse's ability to care for a patient, due to clinical needs, changes that occur and the care of different patients. In order to prevent unwanted results, nursing that must anticipate, react and adapt, remain attentive and vigilant so that the management of complexity and risks is carried out effectively.<sup>26</sup>

Other competences such as education, experience and specialization were mentioned<sup>15</sup>. Experience, although cited in only one study, emerges as one of the characteristics of nurses to prevent or minimize adverse events. In this context, investments in education with a focus on improving the quality and safety of the health system are cited. Thus, education is considered a very important tool to ensure safe care, as it contributes to professional qualification.<sup>29</sup>

Emotional stability emerged linked to personal satisfaction with work, in which the professional's experience and emotions are as important as scientific knowledge. Professionals with a higher level of emotional react better to stressful situations and tend to be more proactive and successful in problem solving and, therefore, better focused on aiding patient safety.<sup>33</sup> The nursing team is characterized by the responsibility of patient care, which causes tension and responsibility, aggravated by the permanent experience with pain, suffering and death, which favors the emergence of psychological problems.<sup>16</sup>

One of the studies considered the cognitive and emotional aspects as important for the care practice, as well as the integration with the technologies used, which professionals need to adapt to, using them in the best possible way.<sup>10</sup> The Informatics competency deals

with the use of information and technology to communicate, manage knowledge, mitigate errors and support decision making.<sup>10</sup> It is important, in this context, to consider that all health activities are related to the search and use of information. The more computerized systems are able to record, store and make this information available, the better the professional's act in terms of decision-making will be.<sup>32</sup>

In the development of this care, the nurse is responsible for (a) managing the care provided to users associated with the execution of administrative, educational and research activities, with the aim of improving professional practice.<sup>30</sup> Faced with this situation, leadership emerges as a competence, since it is responsible for managing care, and which involves care and management activities. From leadership, synchrony of teamwork, risk reduction and quality service are obtained.<sup>5</sup>

It must be noted that in a context in which the quality of care must be evidenced, management can bring countless benefits to institutions and patients. From the introduction of the Sentinela Network, by ANVISA in 2001, and with the adoption of new technologies in the health area, risk management started to be used, systematizing the analysis and treatment of adverse events. Risk management helps to prevent risks and harm to patients and, therefore, provides safe and quality care.<sup>9</sup>

For this reason, it is necessary for nurses to acquire and/or synthesize essential skills, specializing and using in practice the concepts acquired so that risk management is carried out in order to guarantee patient safety with a quality assistance.

## **FINAL CONSIDERATIONS**

Patient safety is an increasingly discussed and widespread topic, not only among health

professionals, but among the population in general. However, it is noted that there is still a need for greater understanding regarding risk management and all the knowledge that the topic involves.

It was observed that most studies deal with risk management as the global topic of patient safety. Patient safety involves all the quality of care, which must be done in order to reduce damage to the minimum possible, while risk management is implemented with the adoption of strategies, initiatives and resources so that this care is provided safely.

It is important that nurses, as the largest workforce, in quantity, among health professionals, understand the difference so that management occurs effectively and the quality of care is increasing. For this to occur, it is essential that nurses have a set of knowledge, skills and attitudes that make the practice of management a reality. In this research, the following are highlighted: teamwork, patient-centered care, evidence-based practice, safety and safety culture, personal satisfaction with work and nursing education.

The skills highlighted are relevant for the professional nurse, who is an integral member of a multidisciplinary and interdisciplinary team, to have a comprehensive view of their role in the context of patient safety. The nurse is not only the executor of the actions linked to this safety, but the one who actively participates in its implementation in the institutions. Thus, having the essential competences to carry out risk management, in the breadth of the term presented, it directs quality assistance, with a focus on safety.

The limitation of this research was highlighted by the scarcity of studies focusing on competencies aimed at nurses who work with risk management, which guided its objective. However, it generated as a contribution to the inference that

more researchers turn their gaze on the theme of risk management, but with a focus on competences for managerial actions, increasingly required in the profession by the scenario presented.

## REFERENCES

1. NATIONAL HEALTH SURVEILLANCE AGENCY. **Patient Safety and Quality in Health Services Series**. Implementation of the Patient Safety Center in Health Services. Brasília, 2016
2. NATIONAL HEALTH SURVEILLANCE AGENCY; OSWALDO CRUZ FOUNDATION. **Reference Document for the National Patient Safety Program** . Ministry of Health. Brasília, 2014
3. ALDRIGHIJD , WALL ML , SOUZASRRK . **Experience of women in pregnancy at a late age**. Rev. Gaúcha Enferm. [online], vol.39, e2017-0112. Rio Grande do Sul, 2018. Available at: <https://doi.org/10.1590/1983-1447.2018.2017-0112>
4. AROMATARIS E, MUNN Z. **JBI Manual for EvidenceSynthesis** . JBI, 2020. Available at <https://synt hesismanual.jbi.global>
5. BALSANELLI AP, CUNHA ICKO. **Ideal and real leadership of intensive care unit nurses in private and public hospitals** . CogitareNurse; 21(1): 01-07. São Paulo, 2016. Available at: <https://revistas.ufpr.br/cogitare/article/view/42129>
6. BRAZIL. Ministry of Health. Ordinance No. 529, of April 1, 2013. **Establishes the National Patient Safety Program (PNSP)** . Official Federal Gazette : Brasília, 2013a, p.2. Available at: [http://bvsmms.saude.gov.br/bvs/saudelegis/gm/2013/prt0529\\_01\\_04\\_2013.html](http://bvsmms.saude.gov.br/bvs/saudelegis/gm/2013/prt0529_01_04_2013.html)
7. BRAZIL. Ministry of Health. RDC No. 36, of July 25, 2013. **Establishes actions for patient safety in health services and makes other provisions** . Official Gazette : Brasília, 2013. Available at: [http://bvsmms.saude.gov.br/bvs/saudelegis/anvisa/2013/rdc0036\\_25\\_07\\_2013.html](http://bvsmms.saude.gov.br/bvs/saudelegis/anvisa/2013/rdc0036_25_07_2013.html)
8. CAPUCHO HC, BRANQUINHO S, REIS LV. **Risk management and patient safety**. USP. Ribeirão Preto, 2010.
9. COSTA VT, MEIRELLES BHS, ERDMANN, AL. **Best practices of nurse managers in risk management**. Rev. Latin-Am. Nursing, 21(5). Santa Catarina, 2013. Available at: [https://www.scielo.br/scielo.php?script=sci\\_abstract&pid=S0104-11692013000501165&lng=en&nrm=iso&tlng=pt](https://www.scielo.br/scielo.php?script=sci_abstract&pid=S0104-11692013000501165&lng=en&nrm=iso&tlng=pt)
10. CRONEWETT L, SHERWOOD G, BARNSTEINER JH, DISH J. **Quality and Safety Education for Nurses**. Nursing Outlook 55(3):122-31. USA, 2007. Available at [https://www.researchgate.net/publication/6307720\\_Quality\\_and\\_Safety\\_Education\\_for\\_Nurses](https://www.researchgate.net/publication/6307720_Quality_and_Safety_Education_for_Nurses)
11. CRUZ AC, QUARRY MLG. **Patient and Family-Centered Care and Patient Safety: reflections on an emerging proximity**. Rev Bras Enferm . 2020;73(6):e20190672. Available at: <http://dx.doi.org/10.1590/0034-7167-2019-0672>
12. CUNHA ICKO, NETOFRGX. **Nurses' managerial skills: a new old challenge?** Text Contexto Enferm, 15(3): 479-82. Florianópolis, 2006. Available at: [https://www.scielo.br/scielo.php?pid=S0104-07072006000300013&script=sci\\_abstract&tlng=pt](https://www.scielo.br/scielo.php?pid=S0104-07072006000300013&script=sci_abstract&tlng=pt)
13. DANSKI MTR, OLIVEIRA GLR, PEDROLO E, LIND J, JOHANN DA. **Importance of evidence-based practice in nurses' work processes**. CiencCuidSaude , 16(2). Paraná, 2017. Available at: <https://pesquisa.bvsalud.org/portal/resource/pt/biblio-966819>
14. DISCH J, DREHER M, DAVIDSON P, SINIORIS M, WAINIO JA. **The Role of the Chief Nurse Officer in Ensuring Patient Safety and Quality**. The Journal of Nursing Administration, Volume 41, Number 4, pp 179-185. USA, 2011. Available at: <https://pubmed.ncbi.nlm.nih.gov/21430467/>

15. DRESSER S. **The Role of Nursing Surveillance in Keeping Patients Safe** . The Journal of Nursing Administration, Volume 42, Number 7/8, pp 361-368. USA, 2012. Available at: [https://journals.lww.com/jonajournal/Abstract/2012/07000/The\\_Role\\_of\\_Nursing\\_Surveillance\\_in\\_Keeping.6.aspx#:~:text=Nursing%20surveillance%20has%20been%20proposed,to%20reduce%20adverse%20patient%20events.&text=Nurses%20are%20key%20patient%20advocates,all%20phases%20of%20care%20delivery](https://journals.lww.com/jonajournal/Abstract/2012/07000/The_Role_of_Nursing_Surveillance_in_Keeping.6.aspx#:~:text=Nursing%20surveillance%20has%20been%20proposed,to%20reduce%20adverse%20patient%20events.&text=Nurses%20are%20key%20patient%20advocates,all%20phases%20of%20care%20delivery)
16. DUTRA HS, GOMES PAL, GARCIA RN, OLIVEIRA HC, FREITAS SC, GUIRARDELLO EB. **Burnout among nursing professionals in hospitals in Brazil**. RevCuid. 2019; 10(1). Available at: <http://dx.doi.org/10.15649/cuidarte.v10i1.585>
17. FASSINI P, HAHN G. **Risks to patient safety in a hospital inpatient unit: conceptions of the nursing team**. Nursing Journal of the Federal University of Santa Maria. 2. 10.5902/217976924966. Rio Grande do Sul, 2012. Available at: < <https://periodicos.ufsm.br/reufsm/article/view/4966> >
18. FLEURY MTL, FLEURY A. **Building the concept of competence** . Rev. admin contem. v. 5, no. spe, p. 183-196. Curitiba, 2001. Available at: < [https://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S1415-6552001000500010](https://www.scielo.br/scielo.php?script=sci_arttext&pid=S1415-6552001000500010) >
19. LACCORT AA, OLIVEIRA GB. **The importance of teamwork in the nursing context** . UNINGÁ Review Magazine, Vol. 29, no. 3, pp.06-10. Maringá, 2017. Available at: <http://revista.uninga.br/index.php/uningareviews/article/view/1976>
20. MARQUES JM, ALVES LHP, OLIVEIRA NSO, MARTA CB, SILVA RCL. **Safety culture and the communication process among nursing team members** . JOURNAL ENFERMAGEM ATUAL IN DERME - SUPPLEMENT 87. 2019. Available at: <https://revistaenfermagematual.com.br/index.php/revista/article/view/219>
21. MENDES KDS, SILVEIRA RCCP, GALVÃO CM. **Integrative review: research method for the incorporation of evidence in health and nursing**. Text Contexto Enferm, 17(4): 758-64. Florianópolis, 2008. Available at: [https://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0104-07072008000400018](https://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-07072008000400018)
22. MIRACLES LM. **Risk management for patient safety: the nurse and the notification of adverse events**. UFJF. Minas Gerais, 2015. Available at: <https://www.ufjf.br/pgenfermagem/files/2010/05/Disserta%C3%A7%C3%A3o-Lidiane-Miranda-Milagres.pdf>
23. MOHER D, LIBERATI A, TETZLAFF J, ALTMAN DG. **The PRISMA Group - Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement** . PLoS Med 6(7): e1000097. USA, 2009. Available at: <https://doi.org/10.1371/journal.pmed.1000097>
24. PASSION TCR, BALSANELLI AP, BOHOMOL E, NEVES VR. **Managerial competencies related to patient safety: an integrative review**. Rev. SOBECC ; 22(4): 245-253. São Paulo, 2017. Available at < [http://docs.bvsalud.org/biblioref/2017/12/876634/sobecc-v22n4\\_pt\\_245-253.pdf](http://docs.bvsalud.org/biblioref/2017/12/876634/sobecc-v22n4_pt_245-253.pdf) >
25. PEDROLO E, DANSKI MTR, MINGORANCE P, SOUZA MLL, MARINELIJM, CROZETA K. **Evidence-based practice as a tool for the professional practice of nurses**. Cogitare Nursing, vol. 14, no. 4. Paraná, 2009.
26. POTTER P , WOLF L, BOXERMAN S, GRAYSON D, SLEDGE J, DUNAGAN C, EVANOFF B. **Understanding the Cognitive Work of Nursing in the Acute Care Environment**. JONA Volume 35, Number 7/8, pp 327-335. USA, 2005. Available at: <https://pubmed.ncbi.nlm.nih.gov/16077274/>
27. SAGAWA MR, SILVA AEBC, LIMA JC, BEZERRA ALQ, COSTA NN, SOUSA MRG, GIMENES FRE. **Notifiable Circumstances Analysis: Incidents that may compromise patient safety**. Cogitare sick ; 24: e61984. Goiás, 2019. Available at < [http://www.revenf.bvs.br/scielo.php?script=sci\\_arttext&pid=S1414-85362019000100351](http://www.revenf.bvs.br/scielo.php?script=sci_arttext&pid=S1414-85362019000100351) >
28. SHERWOOD G, NICKEL B. **Integrating Quality and Safety Competencies to Improve Outcomes**. Journal of Infusion Nursing, vol 40, number 2. USA, 2017. Available at: <https://pubmed.ncbi.nlm.nih.gov/28248812/>
29. SILVA CPG, APERIBENSE PGGS, ALMEIDA FILHO AJ, SANTOS TCF, NELSON S, PERES MAA. **From in-service education to continuing education in a federal hospital**. Esc Anna Nery 2020;24(4):e20190380. Rio de Janeiro, 2020. Available at: [https://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S1414-81452020000400212](https://www.scielo.br/scielo.php?script=sci_arttext&pid=S1414-81452020000400212)
30. SILVA VLS, CAMELO SHH. **The competence of leadership in nursing: concepts, essential attributes and the role of the nurse leader**. Rev. sick UERJ, 21(4):533-9. Rio de Janeiro, 2013. Available at: <https://www.e-publicacoes.uerj.br/index.php/enfermagemuerj/article/view/10031>

31. SIMAN AG, Brito MJM. **Changes in nursing practice to improve patient safety.** Rev Gaúcha Enferm. 2016;37(esp):e68271. Rio Grande do Sul, 2016. Available at: < [https://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S1983-14472016000500413](https://www.scielo.br/scielo.php?script=sci_arttext&pid=S1983-14472016000500413) >
32. SUDRÉ GA, VERGILIO HAS, JESUS L, SUDRÉ MRS. **Study of the Implementation of Information Technologies in the area of Health in Nursing: an integrative literature review** . J. Health Inform, 12(1): 24-30. Mato Grosso, 2020. Available at: <http://www.jhi-sbis.saude.ws/ojs-jhi/index.php/jhi-sbis/article/view/588>
33. TENG CI, CHANG SS, HSU KH. **Emotional stability of nurses: impact on patients safety.** Journal of Advanced Nursing, 65(10), 2088–2096. Taiwan, 2009. Available at: <https://pubmed.ncbi.nlm.nih.gov/19674173/>
34. ZOMOROD M, SHERWOOD G. (2014). **A new mindset for quality and safety: The QSEN competencies redefines nurses' roles in practice.** Nephrology Nursing Journal , 41(1), 15-22, 72. Available at : <http://www.prolibraries.com/anna/?select=session&sessionID=2965>