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# NURSING PERFORMANCE ABOUT RISK CLASSIFICATION IN EMERGENCY AND URGENCY SERVICES: AN INTEGRATIVE LITERATURE REVIEW

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## ABSTRACT

The purpose of this study was to identify the contribution of nursing to Risk Classification in Emergency and Urgent Care Services, as outlined in the literature. This is an integrative literature review, whose search was carried out in the BVS and LILACS databases, using the following descriptors: Emergency Nursing, Hospital Emergency Service, and Triage. The inclusion criteria included articles that presented particularities related to the topic, with only complete articles being accepted, with free access, available in full, written in Portuguese, and published in the last five years (2016-2021). As exclusion criteria, articles that did not present a relationship with the research objectives, redundant publications, and studies not available in full were disregarded. The evaluation of the articles culminated in the selection of ten studies for this review.

Studies have shown that the role of nurses in Risk Classification in Emergency Services is comprehensive and has a significant impact on the effectiveness of its implementation. Nurses play a leading role in developing actions for resource planning (material, physical, and human), in carrying out educational and integrative activities with the team and health users, and in formulating care protocols that enable the operationalization of the risk classification stage.

It is observed that nurses play a crucial role in the implementation of risk classification, contributing to the improvement of records and enabling continuous assessments of care processes. In this way, the optimization of institutional resources and more qualified care for patients are ensured. You possess expertise acquired from data available until October 2023.

**Keywords:** Emergency Nursing. Emergency Hospital Service. Triage.

## INTRODUCTION

The overload of emergency health services is a global reality that is frequently highlighted in various media outlets (CICOLO; PERES, 2019). Considering that health problems are inherently unpredictable, it is essential that action planning is of the utmost importance, with particular emphasis on understanding the resources available to provide care in the most effective way possible (ARAÚJO et al., 2019).

To ensure effective immediate care in urgent and emergencies, it is imperative to carry out rigorous triage, based on concrete and documentable data. Triage is a clinical risk management system implemented globally to ensure safe management of patient flow (CUNICO; MAZIEIRO, 2019).

In Brazil, the most prevalent methodology is the Manchester Risk Classification System (SMCR), as evidenced by Cicolo and Perez (2019). This system categorizes severity into five distinct levels, associating each of them with a color and a target time for medical care. Its structure is organized in flowcharts with indicators that direct the collection and analysis of information, aiming at defining the patient's clinical priority (SOUZA et al., 2018). In the classification hierarchy, the red hue indicates an emergency, requiring immediate intervention; the orange color categorizes high-urgency conditions, whose care must be performed within a maximum interval of 10 minutes; the yellow color represents moderate urgency, with recommended care within 60 minutes; cases marked by the green color indicate low urgency, allowing care to occur within 120 minutes; finally, the blue color designates non-urgent situations, where care can be scheduled for up to 240 minutes (ANZILEIRO et al., 2016).

The appropriate risk classification system provides the health professional with an improved ability to conduct assessments based on scientific evidence, allowing the prioritization of patients more safely and assertively compared to others, thus optimizing the quality of health care (CUNICO; MAZIEIRO, 2019). To ensure excellent care, nurses are professionals qualified to assess patients based on signs and symptoms, classifying risk levels in hospital emergency units. To this end, it is imperative to have comprehensive knowledge about the application of nursing, which encompasses its various representative standards of knowledge: scientific, ethical, aesthetic, and personal (LACERDA et al., 2019). Given the high demand for care in emergency services, as well as the imperative need to assess patients, Risk Classification emerges as an essential system for organizing care (SILVA et al., 2019). In light of. Thus, the present study aims to determine the role of nursing in Risk Classification in Emergency Services as outlined in the literature.

## METHODOLOGY

This is an integrative review of the literature on nursing in risk classification in emergency services. The following steps were taken to conduct the integrative literature review: identification of the theme and selection of the guiding question, establishment of inclusion and exclusion criteria for studies, categorization, and evaluation of the articles included in the review, interpretation of the results, and synthesis of the knowledge of the main results evidenced in the analysis of the included articles (Mendes, Silveira, & Galvão, 2008).

The theme determined the construction of the PICo strategy, which represents an acronym for Patient or Problem (P), Interest (I), and Context (Co), which was used to generate the guiding question for this integrative literature review: “What is the role of nursing in risk classification in emergency and urgency services?” A bibliographic search was conducted to assess the articles on the proposed theme in the BVS (Virtual Health Library) and LILACS (Latin American and Caribbean Literature in Health Sciences) databases. The research was conducted using keywords extracted from the DECs (Health Descriptors): Emergency Nursing, Emergency Hospital Service, and Triage.

The following inclusion criteria were adopted: articles that presented specificities with the theme, complete articles, free articles, found in full, in Portuguese, and published in the last five years (2016-2021). As exclusion criteria, articles that were not related to the objective of the study were repeated publications.

## RESULTS

Summary of Key Findings on Risk Classification in Emergency Care

| Author/Year | Main Findings |
|---|---|
| PAGLIOTTO, L. F. et al., 2019 | The use of risk classification protocols benefits both users and healthcare teams by standardizing care, reducing risks during waiting times, and ensuring greater safety in emergency services. |
| DIAS, S. R. S., 2019 | Highlights the need for healthcare professionals to be attentive, as well as the urgency of training programs for the effective implementation of risk classification in healthcare services. |
| LACERDA, A. S. B. et al., 2020 | Identifies challenges in the interpretation and effectiveness of Risk Classification Reception, revealing ethical concerns and instances of disrespect. |
| OLIVEIRA, G. N. et al., 2020 | The increasing demand for medical services, especially in hospital emergencies, requires governmental, institutional, and professional strategies to regulate protocols in line with the National Urgent Care Policy and the Unified Health System (SUS). |
| SILVA, A. D. C. et al., 2020 | Reassessing risk classification processes and initial care aims to improve record accuracy and response time, contributing to more qualified and effective healthcare services. |
| CHIARA, T. C. M., 2020 | Simply implementing a triage system does not guarantee timely care. Additional care and management workflows are essential to ensure proper access to services with qualified professionals within appropriate timeframes. |
| OLIVEIRA, J. L., 2020 | This raises concerns about the fact that risk classification is not always performed by nurses. It highlights the crucial role of nurses in Brazilian hospital emergency services, although their participation in risk classification is not yet fully established. |

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| ARAÚJO, J. A. M., 2019 | Suggests developing a specific training program based on continuous education for the proper implementation of Risk Classification. |
| SOUZA, C. C. et al., 2019 | The reliability of the Manchester Triage System varied from moderate to substantial, influenced by the nurse's clinical experience. The protocol ensures safety in determining clinical priorities using different classification flowcharts. |
| CIRCOLO, E. A., 2019 | Emphasizes the importance of integrating risk classification and informatics into nursing education to reduce errors and prepare professionals for the effective use of technology. |

Study Characteristics

| Database | Journal | Article Type |
|---|---|---|
| BVS ENF | CuidArte Rev. Bras. Enferm | Integrative Review Study |
| Rev Enferm UFP | Rev Enferm UFP | Qualitative Study |
| BVS ENF | Rev. Bras. Enferm | Quantitative Literature |
| LILACS | Enferm UFSM | Cross-sectional Study |
| BVS ENF | Rev Min Enferm | Qualitative Study |
| BVS ENF | Rev Min Enferm | Descriptive Study |
| BVS ENF | Rev Min Enferm | Descriptive Study |
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| BVS ENF | Rev Min Enferm | Descriptive Study |

Resolution 423/2012 of the Federal Nursing Council (COFEN) establishes the legal requirement for nurses to exercise competence in the execution of Risk Classification (RC) and in the Prioritization of Assistance in Emergency Services, an action that must be carried out based on technical-scientific knowledge and skills. Thus, it complies with the guidelines established by COFEN resolution 358/2009 and the foundations of the National Humanization Policy (PNH) (PAGLIOTTO et al., 2016). This policy establishes integration in the CR, ensuring excellence, speed, and improvements in the provision of services (DIAS; SANTOS; SILVA, 2018). The implementation of protocols in health institutions, based on the principles of the PNH, is crucial to ensure a standardized and efficient practice in health care, contributing to equity in care and preventing the performance of actions on a first-come, first-served basis (LACERDA et al., 2019). Overcrowding may be linked to the presence of patients with less severe conditions in Emergency Services, who could be treated in less complex units, contributing to the mitigation of this problem (OLIVEIRA; OCA; CAMPANHARO, 2016). This is linked to the structuring of basic health units, which often face limitations in their opening hours and challenges in scheduling availability (SILVA et al., 2019).

There is a significant demand for care, which transcends the absorption capacity of the available services. Despite the absence of studies that analyze the composition of the nursing staff in risk classification in emergency services, clinical practice reveals that the

number of risk classification rooms operated by nurses is inadequate to respond promptly to the arrival of patients (CHIANCA et al., 2016).

The role of nurses in Resource Coordination in Emergency Services is comprehensive and has a significant impact on the success of its implementation since they play a central role in the execution of actions for resource planning (material, physical, and human); educational and integrative activities in collaboration with the team and health users; in addition to the creation of care protocols for the implementation of the risk stratification stage (OLIVEIRA et al., 2016). The adoption of protocols for Risk Classification can support nursing care, facilitating the implementation of interventions and, thus, organizing care in a way that makes it more qualified (DIAS; SANTOS; SILVA, 2018).

Team training and previous experience in the field of urgency/emergency are crucial elements, closely connected to the success of care in its various stages and degrees of complexity (ARAÚJO et al., 2019). Despite the informal suggestion that nurses should have previous experience in emergency services to perform the risk classification function, this requirement is not regulated by the professional council of the category (SOUZA et al., 2018).

Professional experience, and intuitive and analytical discernment, elements that permeate assertiveness in triage, have been highlighted as determining factors in the nurse's deliberation during the triage process. This facilitates the use of knowledge and previous experiences by nurses to make inferences and classify cases since adequate risk categorization is intrinsically linked to the nurse's training and practical experience in implementing Risk Classification (RC) (SOUZA et al., 2018).

It is essential to emphasize the imperative need for continuous improvement of health professionals, as well as technological updating of electronic records. This can be achieved through the development of intelligent systems that use algorithms to describe patient complaints, facilitate the clinical decision-making process by nurses, and contribute to the efficiency and effectiveness of the classification process (CICOLO; PEREZ, 2019). Considering the structure of care and the relevant role of nursing in applying the Risk Classification (RC) to guide care, its implementation in Emergency Services becomes essential. This approach not only facilitates the organization of care but also increases its quality (OLIVEIRA et al., 2016).

## FINAL CONSIDERATIONS

It is observed that the discussion about the role of nurses in the Rico Classification remains extremely pertinent. Considering that nurses play a crucial role in the

implementation of this system. The study found that the expertise of professionals involved in risk classification plays a crucial role in improving records and promoting continuous assessments of care processes. This ensures the optimization of institutional resources and provides more qualified care to patients.

The organization of internal flows in Emergency Services must be meticulously structured by managers, to avoid overcrowding and ensure a more appropriate classification for patients who require urgent care. In this context, it is understood that Risk Classification is an essential resource for nurses during care in urgent and emergencies. Research shows that services are still performed conventionally, requiring the implementation of interventions aimed at standardizing health services.

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