# RESEARCH

### NURSES' OPINION ON RISK CLASSIFICATION IN EMERGENCY SERVICES

OPINIÃO DE ENFERMEIROS SOBRE CLASSIFICAÇÃO DE RISCO EM SERVIÇOS DE URGÊNCIA
OPINIÓN DE LOS ENFERMEROS SOBRE LA CLASIFICACIÓN DE RIESGO EN LOS SERVICIOS DE URGENCIAS

Carmen Lucia Mottin Duro <sup>1</sup> Maria Alice Dias da Silva Lima <sup>2</sup> Luciana Andressa Feil Weber <sup>3</sup> <sup>1</sup> RN. PhD in Nursing. Adjunct Professor. Federal University of Rio Grande do Sul – UFRGS, School of Nursing, Department of Assistance and Professional Guidance. Porto Alegre, RS – Brazil.

<sup>2</sup> RN. PhD in Nursing. Full Professor. UFRGS, School of Nursing, Department of Assistance and Professional Guidance. Porto Alegre, RS – Brazil.

<sup>3</sup> RN. MS Student. UFRGS, School of Nursing, Graduate Program in Nursing. Porto Alegre, RS – Brazil.

Corresponding author: Carmen Lucia Mottin Duro. E-mail: carmend@enf.ufrgs.br Submitted on: 2017/05/11 Approved on: 2017/12/05

#### **ABSTRACT**

The aim of risk classification in emergency services is to prioritize care, considering the severity of the patient's clinical condition. However, nurses face difficulties in the development of this activity. The study aims to evaluate the opinion of nurses on risk classification in emergency services. This is a descriptive, quantitative study, using the Delphi technique. Three rounds of opinions were collected by means of a questionnaire provided through an electronic platform. Response alternatives were presented in a Likert-type scale and consensus was achieved when the frequency of the percentage of response alternatives was greater than or equal to 70%. The study sample included nurses with professional experience and/or researchers in the studied field. The first round had the participation of 130 nurses, the second 89, and the third 65 nurses. The nurses mentioned that risk classification organizes the flow of patients and reduces the waiting time for severe patients to be assisted. In this process, they use clinical knowledge, professional experience and the ability to manage conflicts. Nurses disagreed that risk classification provides hosting and privacy to patients, and that there is periodical training available for exercising this activity. In conclusion, patients' risk classification strengthens the nurses' care practice; however, strategies must be created to overcome structural difficulties.

Keywords: Nursing Assessment; User Embracement; Triage.

## **RESUMO**

A classificação de risco em serviços de urgência tem a finalidade de priorizar o atendimento, considerando a gravidade do quadro clínico do paciente. No entanto, há dificuldades em relação ao desenvolvimento dessa atividade pelo enfermeiro. O objetivo do estudo é avaliar a opinião dos enfermeiros sobre a classificação de risco em serviços de urgência. Trata-se de estudo exploratório, quantitativo, com utilização da técnica Delphi. Foram realizadas três rodadas de opinião por meio de questionário disponibilizado em plataforma eletrônica. As alternativas de resposta foram apresentadas de acordo com escala Likert e foi considerado consenso quando o percentual das alternativas de respostas apresentasse frequência igual ou superior a 70%. Para a amostra foram selecionados enfermeiros com experiência profissional e/ou pesquisadores da área. Na primeira rodada participaram 130 enfermeiros, 89 na segunda e 65 na terceira. Os enfermeiros indicaram que a classificação de risco organiza o fluxo de pacientes e diminui o tempo de espera, daqueles em estado grave, por atendimento. Para isso, utilizam o conhecimento clínico, experiência profissional e capacidade de gerenciar conflitos. Os enfermeiros discordaram que a classificação de risco proporciona o acolhimento e privacidade do paciente, assim como sobre a existência de capacitação periódica para o exercício dessa atividade. Concluiu-se que os enfermeiros fortalecem sua prática assistencial na classificação de risco dos pacientes, no entanto, é necessária a elaboração de estratégias para superar as dificuldades estruturais.

Palavras-chave: Avaliação em Enfermagem; Acolhimento; Triagem.

#### RESUMEN

La Clasificación de Riesgo en los servicios de urgencias médicas tiene la finalidad de dar prioridad a la atención de los pacientes según la gravedad de su cuadro clínico. No obstante, existen dificultades respecto al desarrollo de esta tarea por parte de los enfermeros. El estudio apunta a evaluar la opinión de los enfermeros sobre la clasificación de riesgo en los servicios de urgencias. Estudio descriptivo, cuantitativo, que emplea la técnica Delphi. Fueron realizadas tres rondas de opinión mediante una encuesta disponible en la plataforma electrónica. Las alternativas de respuesta fueron presentadas según la escala Likert y se consideró consenso cuando el porcentaje de las alternativas de respuestas mostró frecuencia mayor o igual al 70%. Para la muestra, fueron seleccionados enfermeros con experiencia profesional y/o investigadores del área. En la primera ronda participaron 130 enfermeros, 89 en la segunda y 65 en la tercera. Los enfermeros expresaron que la clasificación de riesgo organiza el flujo de pacientes y disminuye el tiempo de espera de aquéllos más graves. Ellos utilizan el conocimiento clínico, la experiencia profesional y la capacidad de manejar conflictos. Los enfermeros opinan que la Clasificación de Riesgo no brinda ni acogida ni privacidad al paciente. También consideran que no se ofrece capacitación periódica para el ejercicio de esta actividad. Se concluye que los enfermeros fortalecen su práctica asistencial en la clasificación de riesgo de los pacientes pero que también deberían elaborarse estrategias para superar las dificultades estructurales.

Palabras clave: Evaluación en Enfermería; Acogimiento; Triaje.

# INTRODUCTION

The increasing demand for emergency services in several countries around the world has resulted in an increased number of consultations and longer length of stay of patients, causing overcrowding. In Brazil, emergency services have also faced problems related to excessive demand. To deal with that, they have adopted mechanisms to organize the access and flow of users. Thus, a risk classification (RC) method was proposed by the Ministry of Health as a protocol and intervention model to organize the assistance in emergency services.<sup>2</sup>

Nurses are the professionals assigned to make the risk classification and to make decisions about the level of clinical priority. Thus, clinical information is obtained by means of objective and subjective data of the patient's health status collected with aid of systematized protocols to ensure the prioritization and organization of care.<sup>3</sup> Considering that the RC aims to optimize the flow of care from the qualification of the care provided at the entrance of the emergency services, nurses have the responsibility to regulate the user's entry into the emergency service. For this reason, nurses who make decisions on screening should have a diverse background knowledge and skills for clinical evaluation and prioritization of patients.<sup>4</sup> However, the constant problem of overloading of emergency services in most urban hospitals poses several challenges for nurses to implement RC.

RC activities occur in an environment where there is pressure for fast actions, sometimes with dissatisfaction on the part of users due to the waiting time to receive assistance.<sup>1</sup> There is also the possibility of RC becoming an obstacle in the flow of patients in the service, resulting in an increased waiting time.<sup>5</sup> The tension generated in the waiting room affects the nurses' work, because these demands fall upon them.<sup>6</sup> Furthermore, there are factors that involve the organization of the emergency care network for the necessary referrals that also interfere with the RC.<sup>3,7</sup> It has been pointed out that nurses face a dynamic environment in the screening process and, for this, they need a flexible approach to classify the risk according to the resources available during the work shift.<sup>8</sup>

At the national level, the research carried out until present has highlighted the evaluation of the effectiveness and quality of the RC and its impact on the dynamics of the organization of emergency services,<sup>9</sup> and the reliability and validity of the Manchester protocol.<sup>10</sup> However, few published works have focused on the work developed by nurses in the RC in the face of the difficulties and vulnerabilities of this task.

It is observed that there are still definitions to be established for the nurses' performance in order to fill the gaps still present in the risk classification carried out in emergency services. In the Brazilian context, in view of the different situations in which emergency units play a role, the identification of the problems faced in the RC process can be used as a basis to qualify the care provided, guaranteeing patient safety and the organization of the service. At the same time, knowledge about the way in which nurses develop the clinical evaluation of patients implies making RC not only a mere selection of patients, but also a clinical practice of these professionals in the daily exercise of emergency care.

Based on the above, the present study sought to know the activities developed by nurses in the Risk Classification process in the sense of substantiating this daily practice in the care of patients assisted at emergency services. Thus, this article had the objective of analyzing the nurses' opinions about the RC activity in emergency services, indicating its potentialities and weaknesses.

## **METHOD**

This is a descriptive, quantitative study using the Delphi technique. This technique seeks to reach a consensual opinion of a group of experts on a particular problem, using articulated validations in rounds of questionnaires in which the anonymity of individual responses on a theme is preserved. At each new round, the process is repeated until divergent opinions are reduced to a satisfactory level and the response of the last round is considered as the prediction or the consensus of the group. The process is repeated until divergent opinions are reduced to a satisfactory level and the response of the last round is considered as the prediction or the consensus of the group.

We used the modified Delphi technique, which consists in the application of a structured questionnaire in the first round. This is different from the traditional Delphi technique that starts the rounds with the presentation of open questions. Therefore, a structured questionnaire was created for data collection, based on literature review on the topic as recommended for use of the modified Delphi technique. The questionnaire was made available online through the electronic Survey Monkey platform\*.

The questionnaire presented in the first round was composed of 59 questions, of which 23 addressed the profile of the participants and 36 had assertions to asses the opinion of respondents on RC. Information about the participants' profile included data on sociodemographic characteristics, training and professional experience, place of professional performance, and use of RC protocols in service. In the sections of to asses the opinion on RC, Likert-type response options were used. The five alternatives were: I strongly disagree; I disagree; I neither agree nor disagree; I agree; I totally agree. The questions included the dynamics of work organization in RC, the actions of nurses in the work organization in the RC of patients, the knowledge and skills of nurses needed to perform RC, the use of the RC protocol/ scale and organizational structure for RC. The first seven questionnaires represented the pre-test to evaluate the applicability and clarity of both the instrument and the electronic platform.<sup>12</sup>

A convenience sample was used; the participants were searched in the Lattes Platform, which is the database of curricula and institutions in the areas of science and technology of the National Council for Scientific and Technological Development (CNPq). The simple search tool was used, filling in the "subject" field with the words "nursing in the risk classification of emergency services". After that, the curricula were evaluated and selected by the researchers according to the following inclusion criteria: to be a nurse, to have research and intellectual production on the theme investigated and/or experience in services of the emergency care network and with reception with risk assessment and classification, Manchester risk classification or other risk classificatory protocol in services of the urgent care network for at least six months.

After the selection of nurses, an invitation was sent through the contact available in the curriculum on the Lattes Platform. In order to recruit other professionals to compose the sample, the selected nurses were asked to indicate other nurses and their electronic addresses, to participate in the Delphi study, according to the chain network technique or *snowball technique*. The snowball process began in December 2012 and was completed in May 2013. Thus, 476 nurses were invited to participate in the study, and 179 formalized their intention to collaborate with the research.

Data collection took place from May to October 2013, with the application of the questionnaire in successive rounds,

until consensus was reached. The deadline for participants to respond to the rounds was 15 days, with a 15-day extension, in order to obtain a larger number of participants in the sample.

In all the rounds, the specialists received an invitation with a link to access the Informed Consent Term. The completion of the Term indicating their acceptance was necessary to open the questionnaire.

In the first round, 130 out of the 179 invited professionals answered the questionnaire. After this step, the alternatives marked by the respondents in each question of the instrument were processed. Consensus was considered to have been reached when the percentage of the options "I totally agree" and "I agree" presented frequency greater than or equal to 70% for each statement of the instrument.<sup>11</sup>

The analysis was performed using descriptive statistics, and the quantitative variables were described by means and standard deviations, when the distribution was symmetric. In case of asymmetry, medians and interquartile ranges were used to describe the variables. Sample distribution was tested by the Shapiro-Wilk test. Categorical variables were presented by absolute and relative frequencies.

In the second round, the questionnaire was re-written and left with 23 questions to assess the opinion on RC which had not obtained the consensus percentage. The "I neither agree nor disagree" option was eliminated from the response alternatives in order to reduce the dispersion of the results in the presented statements. The questionnaire was resubmitted to the 130 respondents of the first round and was answered by 89 participants. In this round, consensus was considered to have been reached when the percentage of responses had a value equal to or greater than 70% in the "agree" and "totally agree" alternatives. The answers were analyzed, obtaining consensus on 15 questions.

Sixty-five experts participated in the third round. They answered the questionnaire with only the 08 questions for which consensus had not been obtained in the previous round. The response alternatives presented to the participants consisted in "I agree" and "I disagree". Consensus was considered to have been reached in this round when the frequency of the "I agree" response was equal to or greater than 70%. No consensus was reached for 03 questions in relation to the previous round.

The anonymity and secrecy of the information were maintained, as established in the Resolution n°. 466 of December 12, 2012 of the National Health Council on research involving human beings. The project was approved by the Research Ethics Committee of the UFRGS, CAEE 12299113.5.0000.5347.

#### RESULTS

One hundred and thirty nurses participated in the panel of the first round of opinions, obtaining an adhesion of 76.5% of

the invited nurses. In the second round of opinions, 89 nurses (68.5%) answered the questionnaire, with an abstention of 31.5%. In the third round of opinions the questionnaire with questions for which consensus had not been reached in the second round was sent for the 89 participants in the Delphi study and 65 (73%) answered the questions; thus, the abstention rate was 27%.

The mean age of the nurses participating in the first round (n = 130) was 38 years ( $\pm$  10.8 years). There was a prevalence of females (81.5%). The time elapsed after completion of undergraduate training presented a median of 10 years (6-22). The majority of the participants (118) had a postgraduate degree (90.8%), of which 54 (45.8%) had specialization, 41 (34.7%) had a master's degree and 18 (15.3%) had a doctorate degree.

Regarding the experience in emergency services, 116 (89.2%) participants reported having such experience, and 14 (10.8%) reported having no experience in this area, and the median time working in the area was five years with an interquartile range of 1

to 10. The nurses developed activities in different states, grouped by regions. The southern region (RS, SC and PR) prevailed with 78 participants, followed by the center-west region (MT) with 22 participants, the Southeast region (RJ, SP and MG) with 15 nurses and the Northeast region (CE and BA) with 15 nurses.

The characteristics of the participants of the second (n = 89) and third rounds (n = 65) were representative estimates of those observed in the first round.

Of the 36 statements presented in the instrument, 28 obtained consensus (Table 1). Eight assertions did not reach consensus, and of these, two did not reach 70% agreement in the response alternatives. After the third round of the study (Table 2), the remaining six assertions obtained a percentage above 70% in the "I disagree" and "I strongly disagree" alternatives (Table 3).

The results regarding the assessment of the opinion with the percentage of agreement in the answers of the participants are presented in Table 1.

Table 1 - Consensus on assertions for measuring the opinion on Risk Classification in emergency services in the three rounds of the Delphi study, Brazil 2013

Sections of the questionnaire	Assertions	
Dynamics of the work organization	Prioritization of risk according to clinical severity.	92.4*
	It evaluates the clinical status of the patient and determines the priority of care.	85.4*
	It organizes the flow of patients in the Urgency/Emergency Service.	89.2*
	It allows the reduction of diseases and sequelae of urgent patients.	92.3*
	It allows the evaluation of the patient within the time recommended by the protocols.	75.4***
	It contributes to the decrease of the waiting time for serious patients to receive assistance.	77.7*
	It facilitates the organization of the work of nurses in the Urgency/Emergency service.	75.4*
	It contributes to the organization of the Urgency/Emergency service.	92*
Nursing actions in the evaluation	The nurse listens to complaints and the antecedents of the patient's health conditions during the RC.	78.5*
	The nurse performs the evaluation of the clinical situation based on the signs and symptoms of the patient in the RC.	87.7*
	The nurse performs the RC of the patient within the period of time stipulated by the protocol used.	72.3***
	The nurse guides the patient about the meaning of the colors of the bracelets, which differ according to the severity of the health conditions.	77.6**
	The nurse informs the patient about the waiting time for care.	84.2**
	The nurse instructs the patient to informe the professionals if there is any modification of his symptoms.	85.4**
	The nurse informs the patient and family/caregivers about RC.	77.6**
	The nurse has autonomy to perform the RC.	85.2*
Knowledge and skills	The nurse uses clinical knowledge to perform the RC in order to assess the patient's health status and define the priority of care.	87.6*
	The nurse uses communication skills to perform RC.	83.8*
	The nurse needs professional experience to evaluate the patient in the RC.	85.4*
	The nurse manages conflicts with users during RC.	79.3*
	The nurse needs specific training to perform RC.	97.0*
	The nurse uses the intuitive ability to evaluate and prioritize the care during RC.	79.8**
	The nurse considers the social situations related to the patient's problem when determining the priority of the risk.	69.6**

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Table 1 - Consensus on assertions for measuring the opinion on Risk Classification in emergency services in the three rounds of the Delphi study, Brazil 2013

Sections of the questionnaire	Assertions	Agreement %
Use of the protocol	The RC protocol adopts criteria that contemplate the epidemiological profile of the population served.	75.3**
	The RC protocol establishes priorities for care with which nurses agree.	90.8***
	The RC protocol defines care priorities that generate disagreements between doctors and nurses.	76.9*
	The RC protocol establishes care priorities by means of adequate flowcharts to support the nurses' decisions.	82.0**
Organizational structure	In the RC sector, the equipment for measuring vital signs, blood glucose, and blood oxygen saturation level favors the accomplishment of RC by the nurse.	79.6*

<sup>\*</sup> Consensus obtained in the first round.\*\* Consensus obtained in the second round.\*\*\* Consensus obtained in the third round.

Table 2 - Assertions to measure the opinion on Risk Classification in emergency services that did not obtain consensus in the three rounds of the Delphi, Brazil, 2013

Assertions	I agree (%)	I disagree (%)
The nurse forwards non-urgent patients to Primary Care and outpatient services.	45 (69.2)	20 (30.8)
The nurse uses knowledge of the epidemiological profile of the population served to perform the risk classification of the patient.	39 (60.0)	26 (40.0)

Source: Duro, Lima, Weber; 2016.

Table 3 - Assertions to measure the opinion on Risk Classification in emergency services in which the disagreement was greater than the agreement in the three rounds of the Delphi, Brazil, 2013

Assertions		I disagree (%)
The nurse reassesses the patients' clinical situation while he is waiting for care.	17 (26.2)	48 (73.8)
The environment makes it possible for the user to be received for the realization of Risk Classification by the nurse.	25 (28.0)	64 (71.9)
The physical area of the Risk Classification sector promotes privacy to the user	24 (27.0)	65 (73.0)
The sizing of the nursing team per work shift is sufficient to carry out Risk Classification.		64 (72.0)
Periodic training on the use of Classification Protocols for nurses is provided.	18 (20.2)	71 (79.8)
The Risk Classification Protocol is continuously evaluated to ensure its applicability in the definition of care priorities, according to the patients' risk.		51 (78.5)

Source: Duro, Lima, Weber; 2016.

### **DISCUSSION**

The assertions regarding the dynamics of the work organization in the RC in emergency services obtained a consensus above 70% in the first round of the Delphi study. They represent, therefore, potentialities for the nursing work. Participants considered RC as a guiding methods for flow and prioritization of users according to the severity of their clinical state, contributing to reduce the waiting time in case of severe clinical conditions. A study found that the accuracy of risk prediction performed at the screening by nurses demonstrated high sensitivity and specificity at the admission of patients to the emergency department. RC is also considered as a support in the care, admission and discharge from emergency sectors, and is indicated as an instrument for ordering the patients' flow according to the severity of health status.

Moreover, it is a consensus that RC organizes the work of nurses and the emergency department, reinforcing that nurses perform the clinical management of patients, organizing the nursing team and the resources and materials of the service. The purpose of RC is to streamline the identification of priorities and needs for patients seeking care in the emergency care network.

The evaluation of the clinical status of patients was highlighted, to identify those who will need critical care. This result confirms the goal of screening in international and national services to determine and classify patients quickly to order the urgencies based on clinical need. Patients have to receive adequate care for their needs, and the resources of the emergency service have to be used to guarantee assistance in a timely manner.<sup>5,14</sup>

For the development of RC, the participants agreed that nurses use qualified listening of complaints and of the health

conditions of patients to identify the problem that motivated the search for the emergency service. Research has shown that directed listening enables nurses to identify risk and vulnerability and welcome the patients' self-assessment in order to make a decision in the RC.¹6 Listening to information and the way in which patients explain their problems during the screening were also flagged as the starting point for the decision-making and the clinical classification of the patients. <sup>2,16</sup> Thus, listening to complaints and the commitment to provide responses to the health needs of the users in the evaluation of the patient's clinical situation represent important abilities of nurses in the RC process.

Allied to listening, another potentiality of RC was the use of clinical knowledge to identifying the risk according to the patient's health condition. A study investigated the specificity of clinical information obtained at the screening process and how this relates to the patient's risk classification. The study concluded that the care provided in the emergency service is significantly related to the accuracy in problem identification and its interaction with the clinical decision-making process in the Risk Classification.<sup>17</sup> During RC, professionals seek relevant information about the patient. This is a continuous process that requires a combination of information, clinical knowledge and professional judgment.<sup>18</sup> Thus, the nursing activity in RC has been described as complex, not only consisting of the result of an assessment for the determination of risk based on professional protocols, but also on the way nurses develop strategies for decision making for prioritization of care.

The use of intuitive ability in the development of RC was emphasized by participants. Intuition plays an important role in making difficult decisions. Intuitive ability is one of the skills that, coupled with professional experience, is responsible for tacit knowledge, which is the knowledge that people acquire throughout their working experience, but it is not written anywhere. A research examined the screening work developed by nurses when receiving ambulances and concluded that nurses use their clinical competence, health care experience, and intuition. Another study has similar results, confirming that nurses articulate scientific and clinical knowledge with tacit knowledge, besides the knowledge of the classificatory protocol, using their experience as a guide in the exercise of this activity. <sup>20</sup>

Communication was stressed in the study as a potential ability in the exercise of the activity. In the international scenario, it is important to note that in the screening, fast decision-making with limited information requires effective communication between nurses and other professionals to initiate safe, efficient and quality treatment.<sup>20</sup> Thus, in the RC, the communication should be clear, concise and consistent so as to avoid the risk of inadequate assessments and prioritization.

The experience gained with the time of professional practice in the recognition of the symptomatology of the diseases was indicated by the participants as a factor that contributes

to greater confidence at the moment of evaluating patients. This result reinforces the idea that protocols are used to support the decision-making but do not replace the skills of an experienced nurse acquired over many years in the profession.<sup>17,20</sup>

It was agreed among the participants that the nurses manage the conflicts that occur in RC, most of the times, due to the discontentment of patients classified as green, with the prioritization of care for patients classified as yellow and orange. Research indicated RC as the first patient assessment access to care in emergency services, and because of this, users often externalize to nurses their frustrations.<sup>21,22</sup> Thus, nurses face these situations and seek strategies to deal with conflicting moments.

Among the strategies is the consideration of social situations related to the patient's problem at the time of determining the priority. The agreement in this aspect indicates that, by valuing the social context, nurses create possibilities to avoid conflicts. Knowing different ways of coping with the health problem also helps to categorize the level of risk and prioritize patient care in the face of a high degree of uncertainty resulting from reduced RC time. 3,16

The autonomy of nurses stood out as a strong aspect among the participants. Knowledge of RC opens possibilities for power relations between the different categories of the health team, and as a consequence, determines the autonomy in relation to the knowledge acquired.<sup>3,15</sup> Even using protocols validated for signs and symptoms that aim at clinical treatment, the nurses' decision-making at RC is a result of the nurses' knowledge about the prioritization process of clinical situations, and therefore results from their autonomy in the exercise of this activity.

The participants agreed that nurses explain to users how RC works. However, a study based on the opinions of the users about RC found flaws in the instructions of the flow of care and found that information on the role and functioning of RC could be improved. Thus, there are dissonances between nurses and patients regarding the perceptions of the information provided. This situation calls for the need for technical and humanistic training of the health team working in the context of RC, regarding the provision of information and instructions to patients who access emergency services. 16

Regarding the use of classification protocols/scales in the RC, flowcharts were considered adequate to support the nurses' decisions, as well as for meeting priorities. This premise is in line with studies that indicate that the protocols offer legal support in order to manage the access and flow of patients in emergency services. In addition, these protocols have been organized to enhance the exercise of nursing activities at RC, facilitating the decision-making process and reducing the bias of subjectivity inherent in the clinical decision-making process. However, it must be taken into account that the reasoning and the sensibility of professionals must not be disregarded when using classificatory protocols.

In this study, we considered as weaknesses of the RC process the items in which disagreement ("I totally disagree" and "I disagree" answers) reached a percentage above 70% and those in which agreement was not reached after the third round. Thus, the disagreement in the affirmation that the nurses perform the reassessment of the clinical situation of the patients during the waiting time after the risk categorization is already made and prioritization of the care represent a fragility of the RC. Patients also need attention during the waiting period due to the possibility of worsening or deterioration of the clinical condition or exacerbation of signs and symptoms that were initially unnoticed in the RC.24 International research indicates that reassessment by screening in the emergency department based on patient prioritization should be a continuous process. However, the authors stress that patients in the waiting room may have to wait for extended times between evaluations, leading to undesirable outcomes.<sup>21</sup> The delay to reassess the already classified patients who await medical care is related to the overcrowding of the service and consequent increase in the demand for work.<sup>4,5</sup> In this way, nurses will have to ground their behavior in the RC, in institutional protocols, so that no harm to their professional practice may happen.

Another assertion in which there was no agreement in the answers was that the physical structure of the space where the RC is developed is adequate for the exercise of the activity. Disagreement among the participants is in line with other national studies that demonstrate the fragility of these conditions for RC.<sup>9,24</sup> The environment of emergency services and the technical and scientific knowledge and technological development are factors that influence the efficiency and effectiveness of care, whose main objective is to avoid death and harm to the patient.<sup>24</sup> An adequate environment and interventions focused on the structure and organization of the emergency service are necessary for efficient patient care in the RC.

Still on the structural issue, the participants did not agree that the RC provides privacy and hosting for users. Another study presented a similar result, indicating that the commitment to hosting users during their stay in the service and in the emergency care network is precarious. It is evident that the privacy and the reception of users advocated by the Ministry of Health are different from what actually happens in the daily life of the nurses are differen. In the classification of risk, the first contact of the patient occurs with the health professionals, and from this moment on the process of hosting is initiated. Thus, the involvement of the multiprofessional team is necessary to host patients, otherwise the purpose of this health policy will not be met.

The nurses did not agree that the number of nurses per work shift is sufficient to perform the RC. Studies developed in emergency services have shown that nurses face an excess of demand to provide care to patients who seek these services. 5,9,24 The inadequate size of the nursing team to carry out RC and also

the number of other professionals in the emergency service coupled with the excessive demand and the conflicts resulting from the prioritization of care have been considered as factors that generate wear and emotional overload in these professionals.<sup>21,22</sup> The lack of professionals in all categories to face the complexity of emergent care added to the overcrowding in these services also has an impact the delay to receive assistance.<sup>1,4</sup> This reinforces the need to rethink the number of professionals, both nurses who perform the risk classification and the other categories involved in patient care, in order to qualify the care provided.

With regard to training nurses on RC, there was also a lack of agreement regarding the realization of periodic training for the use of Classification Protocols. This situation contradicts what is stipulated for the exercise of RC, because the specific training of nurses for this purpose is mandatory.<sup>25</sup> Training is aimed at the recognition and identification of patients' needs for RC.

The lack of referral of non-urgent patients to primary and outpatient services did not present a consensus among the nurses of the study, indicating another fragility of the RC. The referrals made by the emergency services have been considered precarious in other studies, noting that the arrangements organized for the emergency care network do not have the capacity to meet the health needs of the population. <sup>3,7,24</sup> The access of users to the health system continues to be, most of the time, through the hospital and non-hospital emergency doors. There are no referrence and counter-referrence mechanisms in emergency departments, and thus patients classified as green and blue may receive impaired care because the classification may become superficial and inadequate, posing risks to the population. <sup>7,23</sup>

However the study has limitations. The research is limited by the fact that the results obtained refer only to the individuals who composed the sample. The lack of contextualization of the realization of risk classification developed by the nurses in the different states of Brazil can also be considered limitation for the understanding of the fragilities found in the RC. Hence, there is a need for further investigations that may shed light on the results of the present study.

# **CONCLUSIONS**

Based on the opinion of the nurses, experts in the activity of risk classification, potentialities and weaknesses of the RC process were detected. One of the potentialities in the nurses' work is the ability to assess the priority of care, using clinical knowledge, professional experience, and knowledge derived from the practice exercised in the organizational, political, technological and structural context of the emergency service. Among the skills developed was the ability to manage conflicting situations that are imposed in the daily routine of the service, using as a strategy the appreciation of the social context of the users served.

In their practice of Risk Classification, nurses seek work tools to aid them in the exercise of this activity with autonomy and quality. They also strengthen their work potential to help to identify the needs of patients seeking emergency care.

Regarding the weaknesses, it was highlighted that the lack of organizational structure and the disarticulation of services in the emergency network can cause problems for the security and privacy of patients. Hosting during the evaluation and prioritization of care was also highlighted as a difficulty in the reception of users in emergency services. Furthermore, there is a lack of provision of periodic training for updating nurses on RC, which is contrary to the advised in RC protocols.

Further studies on the practice of RC in emergency services are suggested, with a view to contributing to the resolution of the flaws identified in the present study and to the qualification of care provided to the population.

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