Nurses' perception about risk classification in an emergency service

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Objective. Get to know how nurses perceive the accomplishment of risk classification in an emergency service. **Methodology.** In this qualitative study, 11 nurses were included with at least two months of experience in the risk classification of patients who visited the emergency service. Semistructured interviews were used to collect the information. The data were collected between August and December 2011. For data analysis, Bardin's theoretical framework was used. **Results.** The nurses in the study consider the risk classification as a work organization instruments that permits closer contact between nurses and patients. The nursing skills needed for risk classification were identified: knowledge about the scale used, clinical perspective, patience and agility. The availability of risk classification scales was the main facilitator of this work. The main difficulties were the disorganization of the care network and the health team's lack of knowledge of the protocol. **Conclusion.** Risk classification offers an opportunity for professional autonomy to the extent that it is the main responsible for regulating care at the entry door of the emergency services.

Key words: emergency nursing; emergency medical services; triage.

Percepción del enfermero sobre la realización de la clasificación del riesgo en el servicio de urgencias

Objetivo. Conocer la percepción de los enfermeros sobre la realización de la clasificación del riesgo en el servicio de urgencias. **Metodología.** Estudio cualitativo, con inclusión de 11 enfermeros quienes habían tenido experiencia durante, al menos, dos meses en la clasificación del riesgo de los pacientes que ingresaban al servicio de urgencias. Para la toma de la información se utilizó la entrevista semiestructurada. Los datos fueron recolectados entre agosto y diciembre de 2011. Para el análisis se utilizó el referente teórico propuesto por Bardin. **Resultados.** Para estos enfermeros, la clasificación de riesgo es vista como un instrumento de

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organización del trabajo que permite una mayor aproximación enfermero-paciente. Fueron identificadas las habilidades del enfermero necesarias en la clasificación del riesgo: conocimiento de la escala utilizada, ojo clínico, paciencia y agilidad. El trabajo se facilitó, principalmente, por la disposición de escalas de clasificación del riesgo. Las mayores dificultades fueron la desorganización de la red asistencial y la falta de conocimiento del protocolo por el equipo de salud. **Conclusión.** La clasificación del riesgo ofrece una oportunidad de autonomía profesional en la medida en que este es el principal responsable de la regulación de la atención en las puertas de entrada de los servicios de urgencias.

Palabras clave: enfermería de urgencia; servicios médicos de urgência; triaje.

Percepção do enfermeiro sobre a realização da classificação do risco no serviço de urgências

Objetivo. Conhecer a percepção dos enfermeiros sobre a realização da classificação do risco no serviço de urgências. **Metodologia**. Estudo qualitativo no que foram incluídos 11 enfermeiros que tinham tido experiência de ao menos dois meses na classificação do risco dos pacientes que ingressavam ao serviço de urgências. Para a tomada da informação se utilizou a entrevista semiestruturada. Os dados foram coletados entre agosto e dezembro de 2011. Para a análise se utilizou o referente teórico proposto por Bardin. **Resultados**. Para os enfermeiros do estudo a classificação de risco é vista como um instrumento de organização do trabalho que permite uma maior aproximação enfermeiro-paciente. Foram identificadas as habilidades necessárias do enfermeiro na classificação do risco: conhecimento da escala utilizada, olho clínico, paciência e agilidade. O dispor de escalas de classificação do risco foi o principal facilitador do trabalho. As maiores dificuldades foram a desorganização da rede assistencial e a falta de conhecimento do protocolo pela equipe de saúde. **Conclusão**. A classificação do risco oferece uma oportunidade de autonomia profissional na medida em que este se é o principal responsável da regulação do atendimento nas portas primeiramente dos serviços de urgências.

Palavras-chave: enfermagem em emergência; serviços médicos de emergência; triagem.

Introduction

In Brazil, the emergency care services face challenges that need to be overcome, among which overcrowding and care organization stand out, in order to improve the quality of care delivery. In some emergency services, care priorities are established according to the patients' order of arrival, which can imply damage if care is not provided in due time, according to each individual's level of severity.[1] In the attempt to reorganize care delivery in emergency services, the Brazilian Ministry of Health, through the National Humanization Policy, proposed the implementation of welcoming with risk classification as the main strategy to regulate care, in which nurses are responsible for assessing the patients.

In different countries, risk classification is practiced in different countries through the adoption of a guiding protocol, and its main aims are to guarantee immediate care delivery to users with a high degree of risk, to promote teamwork through the continuous assessment of the process, and to permit and encourage agreements and the construction of internal and external care networks.[1] Nurses play a central and articulating role that grants them opportunities to interact and influence the professional actions developed in emergency services with a view to comprehensive, problem-solving and humanized care delivery.[2,3] Risk classification activities enhance the possibilities for professional actions and grant nurses the responsibility to act as

important regulators at the entry door of emergency services.[4] Despite studies aimed at understanding nurses' work in emergency units, few studies are available that assess their perception about the accomplishment of risk classification.

The perception can be defined as the interaction of a body in space and time. When human beings are confronted with an object or situation, they perceive it through a perceptive awareness, granting it a meaning. The human being becomes capable of describing it, imagine it in its full range and becomes capable of saying what it really is.[5] Hence, in risk classification, the nurses' perception of their work can be influenced by these professionals' interaction with the patients, the medical team, the nursing team and the management of the health institution, and by the organization of the service. Thus, through their perceptive awareness, the nurses are capable of describing their work and signifying their role in the accomplishment of risk classification.

As a new activity area for nurses in Brazil, it is considered important for clinical practice to encourage discussions about work in this place, with a view to contributing to the increased production of scientific knowledge on this theme and to enhance reflections that can cooperate towards the better orientations of emergency care actions in nurses' clinical practice, in emergency service management and in nursing human resource formation. In view of the above, this study was elaborated based on the following guiding question: how do nurses perceive their work in risk classification? The general aim was to get to know nurses' perception about the accomplishment of risk classification, and the specific aims were to: identify the facilitating and hampering factors of work in this place; identify, from the nurses' perspective, the skills nurses need for the sake of risk classification.

Methodology

A descriptive study was undertaken with a qualitative approach. This approach permits the emergence of new aspects, the discovery of new links and new articulations of meaning. Qualitative research permits an immersion in the universe of meanings, of beliefs, aspirations, which can only be unveiled by the subjects who experience it. Through this approach, the social phenomena and personal interactions emerge from the subjects' discourse, giving meaning to the experience.[6] Therefore, this approach is considered appropriate to assess the nurses' perception about the risk classification activity.

The study was undertaken at an Emergency Care Unit of a Brazilian city, which functions 24 hours per day and attends to a mean 100 cases each day. Since September 2009, risk classification has become the management and organization form at the entry door of the unit. It should be highlighted that this is the only public emergency service in the city, with a population of approximately 250,000 inhabitants, which contributes to the service's high demand level. For the sake of the risk classification, nurses have a room at their disposal for the patient assessment, with instruments to measure the vital signs, and the Manchester protocol. It should be highlighted that risk classification nurses do not exclusively attend to this room, which contributes to the accumulation of patients who need to be attended to and to the patients' longer waiting time for medical care. Another factor that should be highlighted is that, at the place of study, there are no designated areas according to the risk level attributed to the patients, where they are forwarded to after the risk classification, as recommended by the Brazilian Ministry of Health. All above mentioned work conditions can interfere in the nurses' perception of their work in risk classification.

Nurses participated in the study who work or have worked with risk classification at the place of study for at least two months. Among the 12 nurses who complied with the inclusion criterion, 11 participated in the study. Only one nurse refused to participate in the research. The sample size was defined according to the exhaustion criterion of the data, which means that all eligible

subjects participated in the study. A research is closed off through the exhaustion mechanism when all available individuals have already been included in the research.[7]

Data were collected between August and December 2011, using a semi-structured interview guided by the following questions: what does it mean to you to work in risk classification? How do you consider the nurses' actions in this place? What factors facilitate and hamper work at this place? According to you, what are the prerequisites for a nurse to work in risk classification? To assess the content and pertinence of the research questions, they were initially applied to four nurses who worked with risk classification and, through the obtained responses, their understanding of the inquiries was observed.

To identify the socio-demographic profile of the nurses in this study, a data collection instrument was used with the following variables: age, gender, time since graduation, educational institution, graduate degree, experience at the institution and experience in risk classification. The interviews were previously scheduled and held at a place and time determined by the nurse, in a private space. The statements were recorded with the subjects' consent and later transcribed for further analysis, in the light of Bardin's content analysis.[8] Content analysis permits apprehending the meanings and interpretation of the facts the researcher is confronted with through the set of the informants' answers. The results were obtained through the exploration of the material, using coding, numbering and classification of the content collected in the interviews. This treatment corresponds to a transformation of the gross data. Through excerpts, aggregation and listing, the units of meaning can be defined, which lead to an exact description of the characteristics pertinent to the content, culminating in the analysis or analytic categories.

Approval for the research was obtained from the Research Ethics Committee (Opinion ETIC 69/2011). Before the start of the interview, the nurses received information about the study objective and consulted about their interest in participating, and were asked to sign the Informed Consent Form.

Results

Among the 11 nurses who participated in the study, eight (72.7%) were female and three (27.3%) male, with ages ranging between 25 and 42 years. Most (nine – 81.8%) of the nurses had worked with risk classification for more than two years. As regards the time since graduation, five (45.5%) nurses had graduated less than five years earlier, one (9.1%) between five and ten years, four (36.4%) between 10 and 15 years and one (9.1%) more than 15 years earlier. The analysis of the interviews permitted the construction of three analytic categories related to the guiding questions of the study: the perception of risk classification work; skills needed for classifying nurses, and facilitating and hindering aspects of RC work.

Category 1. The perception of risk classification work

Most nurses in the study (6 – 54.5%) considered risk classification as a work management instrument, which provides support for their clinical and administrative conducts: *It is extremely important because, formerly, we did not know how to put them ahead of the rest (...) I am able to solve the problem of the most urgent patients, right, in a faster way. And the least urgent cases I attend to when the time allows it (N3); The nurse is fundamental in all of that (...) you classify that patient's priority. So, today, we've got the classification which is much safer, you can't even compare it. We used to work empirically, it's not like that today (N4).*

According to six (54.5%) of the interviewed nurses, the risk classification was also considered as an instrument that grants the nurses valuation and professional acknowledgement from their colleagues and users, and they highlighted the importance of risk classification as an instrument that permits greater nurse-patient approximation

in emergency services: *I believe working in risk classification is more than pleasant (...) you see the result of your work (...) really important right (...) that is a valuation of our profession (N8); It is a very big responsibility for the nurse (...) the decisions are yours (...) it is where the nurse has more autonomy (N2); It is essential (...) it is a very big responsibility (...) it is the first contact with the patient, right, the patient's reception (N9); It is the opportunity to get closer to the patient (...) it is the way you get closer to the patient (...)(N5).*

Category 2. Skills needed for classifying nurses

According to ten (91.0%) nurses in the study, the skills indicated as necessary for classifying nurses are related to the need for theoretical knowledge and personal skills, which can be observed in the following excerpts: *The nurse has to be agile, experienced, direct rapidly and precisely. Always be attentive and alert at all times (...) He needs agility, tranquility, a critical perspective and experience. I think that's it! (N6); I believe he needs experience or be a very developed person when graduating because you do need a clinical perspective, you need experience in the emergency sector in order to be able to do the classification (...) (N4); First, it's the training, right, and I think that, like, you're always recycling (...) it's a lot of responsibility when you're classifying and it means never downgrading the patient's complaint (N5).*

Category 3. Facilitating and hindering factors of work

The third analysis category identified in the interviewees' discourse relates to the facilitating and hindering factors of risk classification work. Seven (63.6%) of the nurses indicated the Manchester protocol as the main facilitator of nurses' work, as it guides clinical practices and enhances the security of decision making: *The protocol itself is a facilitator, it facilitates our work out there a lot (N4); the protocol we have is a guarantee for us who are receiving patients there (N2).*

On the opposite, according to one (9.1%) nurse in the study, although the protocol is the main facilitating instrument of work, other factors related to the patient's complaint may not be present in the flow charts included in the protocol, and these factors should not be ignored during the nurses' assessment: *(...) as regards the classification, it includes the flow charts and there are all others, some other factors beyond this flow chart which should be assessed. Because there are some patients who will not be able to tell you much, right, so you will need to investigate this story until you reach the point of truly knowing what is really affecting that person (N1).*

Although this discourse comes from only one study subject, these elements are considered important, as they may indicate the need to review the protocol, besides highlighting the importance of patient welcoming, without limiting the nurses' assessment to the descriptions of in the risk classification protocol. Besides the Manchester protocol, two (18.2%) nurses indicate the presence of nursing technicians at the reception and in the waiting room as a facilitator of nurses' work in RC: *(...) Yes, another very important thing in the classification that facilitates things a lot is the presence of the nursing technicians at the reception and in the waiting room, which helps with the reassessment and pre-assessment of these patients during the classification (N11).*

Among the hindering aspects of risk classification work, the aspects related to the organization of the internal and external care network stand out. Concerning the internal service structure, the dissatisfaction of four (36.4%) nurses with the lack of an appropriate physical structure for patient management could be observed: *No structure was established here where you direct the patient for care in specific rooms, things are mixed there, lost, that hinders the work a lot (N2); the physical structure of the Emergency service hinders a lot. And the lack of patient flow as well (...) So, where do the yellow patients go, where do the green patients go?(...) The orange and red patients are already forwarded for emergency care. But things are still confusing for yellow, green and blue (N4).*

Other aspects the nurses mentioned (3 – 27.3%) as hindering factors of the work process in risk classification were the lack of an agreement among services with a view to an effective referral and counter-referral system and the lack of structure of the emergency network in the city: *The lack of a structured network in the service and system is a hindering factor with a view to more dynamic forwarding; lack of public policies focused on the Manchester protocol (...) and lack of planning and organization of the service structures (N7); Another hindering factor, I think, is the actual situation we experience, at least here at the Emergency service, because it makes the patients turn to the Emergency Care, because there are loads of patients here who are not from emergency care, that is hindering (...) (N2).*

The entire team working at the emergency care service should understand and accept the risk classification protocol: nurses, nursing technicians, physicians, psychologists, social assistants and administrative clerks.[1] In this study, most of the nurses (7 – 63.6%) indicate that the other team members' lack of knowledge about the protocol hinders risk classification work: *(...) Because I think it's important for everyone to know what the protocol is and, unfortunately, everyone does not know it yet, they think it's just something we buy, something we receive (...) (N1); Hindering is: (...) the professionals' lack of awareness of the Manchester protocol; lack of belief among the other professionals that it really works, mainly in the medical team (N7); The team does not understand it, the physician does not see the reason for the classification, sometimes does not agree. Sometimes he is classifying the patients as yellow but calls them green because they arrived before the yellow patients, he wants to attend to them in order of arrival (...) (N3).*

Discussion

Among the study subjects, 54.5% had graduated less than ten years earlier. None of them had received theoretical content about risk classification as part of their educational background. No specialization degree is required from the nurses as a prerequisite to work in risk classification, which highlights the need to include this theme in the pedagogical projects of undergraduate nursing programs.

In the first analysis category, the nurses indicated the risk classification as an organization instrument of the work process. The study findings are in accordance with the literature in the area. The risk classification organizes the work process, as it prioritizes care delivery to severe patients, enhancing the nurses' security and control of the situation.[9] The risk classification benefits the nurses to the extent that it grants them autonomy. They are able to identify the immediate result of their work by serving as a regulator of the entry doors to the emergency services. As a result of these characteristics, these professionals feel valued and acknowledged before the users and their work colleagues.

It is considered that the nurses have the potential to change the work practices, reduce the waiting times and improve care delivery to users in the emergency services. A study has shown that appropriately qualified and trained nurses are capable of managing and treating more than 30.0% of emergency care cases.[10] According to the study subjects, the risk classification permits greater approximation between nurses and patients. The interviewees' discourse reflects patient welcoming as recommended by the National Humanization Policy, which proposes the implementation of risk classification linked with welcoming practices. Welcoming is an intervention device that makes it possible to analyze the work process with a focus on interpersonal relations. It proposes the change of relations among professional, user, social network and among the professionals themselves, through humanitarian parameters and solidarity. It is a challenge, however, to practice welcoming in emergency services due to the stressful routine at these services, where the constant contact with pain and death can facilitate the workers' distance from the patients and relatives' emotive reality, which culminates in impersonal care and difficulties to act in a humanized manner.[1,11]

Hence, welcoming with risk classification seems to represent an opportunity to recover the true meaning of professional practice, the value of work and teamwork, and the search to solve the users' demands. In the second analytic category, the skills nurses need in their classification activities were identified. The subjects' discourse is in accordance with the existing literature by affirming that, to work in risk classification, nurses need to develop skills like: qualified listening, teamwork ability, clinical reasoning and mental agility for decision making.[12]

The task of receiving patients and setting priorities in the demands of the users who visit the emergency services represents an activity that demands responsibility and specific competencies.[4] In risk classification, the decision process happens in a complex and dynamic scenario, and demands the application of these decisions in a short time period, with limited information. Hence, the nurses need specific knowledge, besides experience in care delivery to patients with different conditions, with a view to safe and effective user care.[13]

In the third analytic category, the facilitating and hindering factors of risk classification work were listed. The Manchester protocol was highlighted as the main facilitating factor of nurses' work. This English protocol ranks the patient in five priority levels.[14] Risk classification protocols or scales are aimed at optimizing waiting times according to the severity of the patients' clinical condition, with a view to treating the most intense symptoms faster and reducing the negative impacts on the prognosis as a result of treatment delays. Thus, it can be guaranteed that therapeutic interventions be initiated in due time.[15, 16] The guiding protocols or scales are important to reduce the subjectivity bias inherent in each professional's perspective. Therefore, in clinical practice, valid and reliable instruments need to be used.[17]

It should be highlighted, however, that none of the protocols captures the subjective, affective and social aspects, whose understanding is fundamental with a view to an effective assessment of the emergency service patients' risk and vulnerability. The protocol does not replace interaction, dialogue, listening, respect, welcoming of citizens and the exploration of patients' complaints in the assessment of their potential problems.[1]

Two (18.2%) of the nurses in the study also indicated the presence of nursing technicians at the reception and in the waiting room as a facilitator of nurses' work. Although this does not reflect most of the nurses' discourse, we find it important to present this factor, which is considered a facilitator of the work, keeping in mind that, in clinical practice, some emergency services that implemented the risk classification have adopted this practice. It should be highlighted, however, that this strategy is used according to the authors to respond the service's need to maintain the nurses restricted to the risk classification room in order to attend to the high patient demand.

As regards the nursing technicians' assessment of patients at the reception desk, no studies are available that prove whether this activity influences clinical patient outcomes, such as mortality, need for hospitalization and length of hospitalization. Therefore, research should be undertaken to verify whether the nursing technicians' assessment before the nurses' assessment is important to bring down the most severe patients' waiting times. Concerning the reassessment after the risk classification, the Manchester protocol recommends that nurses be responsible for this activity, at intervals depending on the degree of risk attributed to the patient.[14]

The nurses indicated the lack of structure of the care network as a hindering factor of risk classification work. At many emergency services, there is no appropriate room for the patients, who occupy all circulation areas, without any distinction according to specialty areas or diagnoses, and often independently of their severity.[18] The Brazilian Ministry of Health establishes that, at the services where the risk classification is adopted as a management tool at the entry door, care needs to be organized along two axes: the red axis for care delivery to severe

patients at risk of death, and the blue axis for care delivery to apparently non-severe patients but who seek emergency care. Each of these axes has different areas, according to the patient's clinic and the work processes established there.[1]

The failure of the care network and severe social situation of the population reflect the care users' profile. In practice, when workers deliver emergency care, they can hardly envisage the users' trajectory through the health system and the difficulties they have gone through or will go through to have their needs attended to.[19,20] It is known that the accomplishment of risk classification alone does not guarantee a better care quality. This strengthens the need to build internal and external agreements to make the process feasible, including the construction of clear flows, according to the degree of risk, and their translation in the healthcare network.

The nurses' discourse reveals that not all care team members are familiar with the protocol used at the service, which was indicated as a hindering factor of risk classification work. This lack of knowledge among the professionals causes disbelief in some cases in the method used to organize the work. It is highlighted that all professionals' adherence to the proposed work guidelines is important to reduce the variations in practice and to guarantee that patients receive the treatment needed in due time.[2] Therefore, it is recommended that, before implementing the risk classification, the involvement of all professionals working at the emergency service should be guaranteed, through broad and open meetings, aimed at sensitizing them and making them adhere to the new care organization tool. That is when the work relations, the care flows and the structural demands needed to guarantee patient care delivery within the deadlines established for each priority level should be reconsidered.[1]

In conclusion, based on this study, according to the nurses at the place of study, the risk classification offers great professional autonomy, to the extent that they become the main responsible for regulating care at the entry doors to the emergency services. Therefore, although the nurses are the main actors in risk classification, their work is influenced by complex structural and management issues, which go beyond their governability and problem-solving power. Hence, at this emergency care unit, spaces for discussion among the professionals should be created, with a view to permitting reflections about the work relations, existing challenges, and indicating directions to overcome the problems. Although no professional experience and specialization degree is required to work with risk classification, the nurses in this study observe that professional experience is an important prerequisite for classifying nurses, besides other skills that direct educational institutions with regard to the desired professional profile for nurses to work at these services.

Finally, the structuring and organization of the care network and the importance of achieving the entire health team's adherence to the risk classification strategy are fundamental to influence the improvement in the care delivered to users of emergency services. The guiding protocol, often considered the main responsible for successful risk classification, is essential to guide nursing assessments, but its actual implementation depends on a structured and organized care network.

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