Nursing knowledge and practices about the...

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ORIGINAL ARTICLE

NURSING KNOWLEDGE AND PRACTICES ABOUT THE MANCHESTER RISK RATING SYSTEM

SABERES E PRÁTICAS DO ENFERMEIRO ACERCA DO SISTEMA MANCHESTER DE CLASSIFICAÇÃO DE RISCO

SABERES Y PRÁCTICAS DEL ENFERMERO ACERCA DEL SISTEM MANCHESTER DE CLASIFICACIÓN DE RIESGO

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Objectives: to evaluate nursing knowledge and practices on the Manchester system and identify the difficulties encountered during implementation. **Method:** descriptive and qualitative study. Research of nine nurses in the reception area of the emergency room of a large hospital in the city of Fortaleza-CE. A semistructured form was used with identification data on the knowledge of nurses about the topic. The findings were organized and analyzed according to Bardin. The research project was approved by the Research Ethics Committee, Protocol 108/11. **Results:** it was noted disagreement over the use of the system by nurses; nurses observed a difference between the previous and the currently service performed; there is an absence of adequate physical space and lack of adherence to the system by other professionals. **Conclusion:** there is a need to improve the training of nurses through a more complete and dynamic course. **Descriptors:** Nursing; Emergency; Reception.

RESUMC

Objetivos: avaliar saberes e práticas do enfermeiro sobre o Sistema Manchester e identificar as dificuldades encontradas durante sua aplicação. *Método*: estudo descritivo e qualitativo. Pesquisa realizada com nove enfermeiros do setor de acolhimento na emergência de um hospital de grande porte na cidade de Fortaleza-CE. Utilizou-se um formulário semiestruturado com dados de identificação sobre o conhecimento dos enfermeiros sobre a temática. Os achados foram organizados e analisados segundo Bardin. O projeto de pesquisa foi aprovado pelo Comitê de Ética em Pesquisa, Protocolo 108/11. *Resultados*: notou-se discordância sobre a utilização do sistema pelos enfermeiros; foi constatada por eles uma diferença entre o atendimento anterior e o realizado atualmente; relata-se a ausência de espaço físico adequado e falta de adesão ao sistema pelos restantes dos profissionais. *Conclusão*: existe a necessidade de melhorias na capacitação dos enfermeiros através de um curso mais completo e dinâmico. *Descritores*: Enfermagem; Emergência; Acolhimento.

RESUMEN

Objetivos: evaluar saberes y prácticas del enfermero sobre el Sistema Manchester e identificar las dificultades encontradas durante su aplicación. Método: estudio descriptivo y cualitativo. Investigación realizada con nueve enfermeros del sector de recepción en la emergencia de un hospital de grande porte en la ciudad de Fortaleza-CE. Se utilizó un formulario semi-estructurado con datos de identificación sobre el conocimiento de los enfermeros sobre la temática. Los hallados fueron organizados y analizados según Bardin. El proyecto de investigación fue aprobado por el Comité de Ética en Investigación, Protocolo 108/11. Resultados: se notó discordancia sobre la utilización del sistema por los enfermeros; fue constatada por los enfermeros una diferencia entre la atención anterior y el realizado actualmente; se relata la ausencia de espacio físico adecuado y falta de adhesión al sistema por el restante de los profesionales. Conclusión: existe la necesidad de mejorar en la capacitación de los enfermeros a través de un curso más completo y dinámico. Descriptors: Enfermería; Emergencia; Recepción.

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INTRODUCTION

emergency unit is considered environment, where stressful constantly patients are admitted in critical condition imminent risk of life, demanding professionals to work in this service with quick, specific actions and intended to recover them. Therefore, it one multidisciplinary sector of expertise for treating seriously ill patients. 1,2

Users of these units are mostly victims of accidents and violence, such as perforation with firearms, knives, suicide, raped and multiple trauma.³ It is noteworthy the growing demand for cases related to acute disorders such as acute myocardial infarction and stroke, requiring therefore an immediate and qualified service.

Considering the unpredictability, the fast pace of work, constant vigilance, physical overload and the relentless pursuit of sustaining life, it would be hard to think of humanized assistance under emergency care.³ Thus, in 2004, the Ministry of Health within its guidelines has established humanization in health care as a major tool to achieve the reception and patients' risk classification in emergency units.⁴

The Municipal Health Secretary Fortaleza adopted in 2005 the "HumanizaSUS Fortaleza" aimed at the implementation and activation of the working groups of the humanization projects, whose goals are within the Municipal Policy of Humanization. Thus, Reception Agreement Classification, as an instrument of this policy, began to be implemented from 2008 in all municipal hospitals in Fortaleza. In this same period, the management group of emergency department initiated implementation of the assistance process of patient care in the emergency service to improve the quality of care delivered by prioritizing patients according to their risk.

In 2009, the Ministry of Health launched the booklet of Reception with Risk Classification in the Emergency Room, to spread some humanization of technology care and management of the health field. It is important to highlight that the reception with risk classification is an improved instrument of quality of emergency services that allows and instigates several changes in practice are an important instruments in the construction of health care networks.⁶

It is known that reception is defined as an act or effect of welcome. This means a closer action of a "being with" and "near", that is, an attitude of inclusion, of being in a

relationship with something or someone. It is a way to operate the work processes in health to meet everyone seeking health care, listening to their requests and assuming a posture able to welcome, listen and give appropriate responses to patients, building a trust and commitment relationship of the patients with the teams and services, contributing to the promotion of the culture of solidarity and to legitimize the public health system. ^{6,7}

The risk classification is a dynamic process of identifying patients who require immediate treatment from the analysis of the preestablished protocol, seeking care focused on the level of complexity. The classification for the prioritized service takes place according to the potential risk, health problems or degree of patients suffering and not in the order of arrival at the service.⁴

The reception with risk classification is an activity that should be performed by the nurse, preferably with experience in emergency services and specific training for the proposed activity. This observation is corroborated by Souza stating that the nurse has been appointed to be responsible for classifying the risk of patients seeking emergency services. Thus, for professional nurses to perform this activity, they need tools that will give them support and security for proper performance.

The Manchester Triage System (MTS) was developed in the city of Manchester, England, in 1994 by a group of professionals specializing in screening. The Manchester Triage System establishes a risk classification based on five categories: Emerging (red) very urgent (orange), urgent (yellow) little urgent (green) and not urgent (blue). 9,10

The risk classification methodology requires that the professional set the complaint or the reason that led the patient to seek emergency room by selecting one of several presentations and then looking for a limited number of signs and symptoms at each level of clinical priority. The signs and symptoms that make discrimination between clinical priorities are called discriminators and are presented in the form of flowcharts presented for each condition. The discriminations indicating higher priority levels are the first to be searched.¹¹

In this hospital studied, the feasibility studies for the implementation of the reception with risk classification were initiated in 2010 by the professionals of the Specialization Course in Critical Patient Care Management, being deployed in January 2011 with the participation of nurses and with the

implementation of the computerized system of Emergency Care Register (RAE) which contains all patients data to the reception with classification.

This study is justified because the Reception with Risk Classification is a national service policy on emergency care, which recommends that the nurses perform an important role in the scheme of service, directly influencing the quality of care and in the process humanization.

Given the above, it aimed to:

- ◆ Evaluate nursing knowledge and practices on Manchester Risk Classification System
- ◆ Identify the difficulties encountered in the applicability of this Protocol.

METHOD

Descriptive, qualitative study, conducted in a large hospital in the center of the city of Fortaleza-Ceara-Brazil. This institution has modern physical structure of the vertical type, with eight floors. It is a reference for the care of patients in emergency and trauma both in the capital of Fortaleza and in all municipalities of Ceará, as to patients from other states of the Northeast. There are 407 beds, however, it is always exceeding its capacity. These beds are for the most diverse specialties, except for obstetrics.

The scenario of this study is included in the Humanization Program to participate in the program of Collaborating Centers and various other programs with humanitarian initiatives: Education Project for Escorts, Project Development and Human Resources Training, Critical Patient Management Project and, recently, SOS Emergency Program to access and quality of care prioritizing the reception with risk classification.

The place of the research was an emergency room unit of the hospital, specifically in the area of reception and risk classification.

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The study population consisted of nurses crowded in the emergency department and in the sample were selected nine who worked in the reception with risk classification. To this end, the following inclusion criteria were determined: 1) To be an institution server; 2) To have duty schedule in the reception area with risk classification; 3) To accept participating in the study by signing the Informed Consent Form. As an exclusion criterion there were nurses retired from work on vacation or leave. All nine selected nurses participated in the interview.

For data collection a form that contained semi-structured interview was used with identification data on the knowledge of nurses about the reception with Manchester Risk Classification System. The findings were organized and analyzed according to Bardin¹².

This project was approved by the Ethics Committee of the Federal University of Ceará, with the protocol number: 108/11. This study followed the ethical aspects of research, which were subject to the requirements established in Resolution 466/2012 of the National Health Council¹³ in particular the preservation of the fundamental bioethical principles of respect for the individual, of beneficence and justice. Those involved were informed about the preservation of anonymity and to publication of the study. Authorization was requested in writing to participate in the study by signing the Informed Consent Form.

RESULTS

Interviews were conducted where each nurse responded to a questionnaire containing eight questions. The following data was obtained:

Table 1. Profile of nurses in the reception of a large hospital - Fortaleza - CE - 2013.

Nurse (N°)	Age	Gender	Time of service in the Emergency room	Time of reception service	Performed the course about Manchester system
1	29	F	3 years	1 year and a half	Yes
2	38	F	8 years	3 years	Yes
3	57	F	20 years	2 years	Yes
4	28	F	1 year and a half	4 months	Yes
5	50	F	21 years	4 years	Yes
6	54	F	20 years	3 years	Yes
7	35	M	4 years	2 years	Yes
8	48	F	18 years	3 years	Yes
9	37	F	4 years	2 years	yes

The nurses interviewed were predominantly female, aged between 28 and 57 years old, with emergency service time

ranged from one and a half to 21 years, time of service in the reception was between 4 months to 4 years. All nurses took the course

on the Manchester system before working with it. (Table I)

The data collected in interviews is subjected to content analysis, allowing the organization of three thematic categories: 1) Use of Manchester Risk Classification System by nurses; 2) Difference between the previous and the currently service performed; and 3) Difficulties encountered while using the Manchester Risk Classification System.

♦ Use of Manchester Risk Classification System by nurses

In the speeches of three nurses, we identified that the Manchester system influenced positively in the classification, where before this implementation professionals felt that the assessment was carried out empirically, and with the implementation of it, professionals gained greater security:

The system is extremely useful as it is reliable, it does not allow subjectivity in the evaluation. (N1)

The system assures the classifier a service classification to the patient more safely for the professional and the patient, and a better time use. (N4)

Prioritizing care and reducing the risks and complications. (N5)

Two other nurses explained that the system allows a proper risk classification, however there are still gaps in the hospital under study:

It would be perfect if we could act as the Manchester reports, but that is not what we experience here. (N2)

Positively, but still it does not work as it should. (N3)

However, for one nurse, a question arose about referrals, where it would be necessary to have a standardized, that is a protocol to be followed in all hospitals:

It allowed better targeting in attendance, although there is not an official protocol, so that complicates referrals, and doing the same, care is not guaranteed in hospital the patient is sent. (N8)

♦ Difference between the previous and the currently service performed

For two nurses there were significant changes concerning the inclusion of the Manchester System:

Today, we have knowledge and know how to act in risk classification. (N3)

Using the protocol we evaluate and screen better patients' service, prioritizing emergencies. (N5)

For three nurses, there were no changes:

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Unfortunately, the way it was implemented in this hospital, there was no difference compared with the previous one. (N1)

There was no change. (N2)

The Manchester System is not yet in the information system as it should be, then the difficulty is still very similar. (N6)

For a nurse, there was an improvement in the performance with the Manchester System, but there is an impasse regarding the multidisciplinary team:

> There was an improvement for us with regard to professional support, however, for the patient and the hospital there was little improvement since the medical adherence was low. (N7)

◆ Difficulties encountered while using the Manchester Risk Classification System

For two nurses, the discontent at the time of conducting the study was in relation to the physical space of the hospital, or a room in which the professional visual field was compromised. It is known that the professional reception must be in the service entry, being seen and seeing the dynamics of emergency:

The nurses were properly trained, but the physical structure and the system does not offer the slightest condition of implementation. In fact, we work with a false Manchester. (N1)

The hospital system does not contribute to how quickly we need to have the classifications. Non-adherence of physicians in patient risk classification [...]. (N9)

Para um enfermeiro sua dificuldade foi encontrada durante a realização do curso sobre Sistema Manchester:

For a nurse, his difficulty was found during the course on Manchester System:

The speed, short time in class, fast test and have to read the questions only on the screen and answer the question in 5 minutes. (N6)

In two nurses talking, there was a complaint regarding the multidisciplinary team, which not all professionals have joined the system:

The multidisciplinary team is not in accordance with the Manchester System. It still depends on higher level decisions. (N3)

We are using the Manchester Protocol, classifying a patient's risk according to severity. However, there were many advances, because doctors serving in the office were not organized systematically to follow the protocol. This brings the lack of integration affecting the patient;

many patients classified as orange goes beyond the waiting time limit (10 minutes), resulting in imminent risk of death. (N7)

In a nurse speech, he found a problem in the demand of patients and the lack of beds in that hospital:

Agreement system of health care even without adequate systematization. (N5)

DISCUSSION

The reception with risk assessment appears of the potentially interventions in the reorganization of the emergency room. This classification protocol despite being a useful and necessary tool, does not guarantee an improvement in the quality of care, since it is not intended to capture the subjective aspects, affective, social and cultural rights, the understanding of which is crucial for effective risk assessment and vulnerability of each person seeking the emergency department. addition, the protocol does not replace the interaction, dialogue, listening, respect, that is the reception of the citizen and his complaint to the assessment of their potential problem.6

Using the Manchester System of risk classification by nurses brings because it gave a change in the logic of service, enabling the prioritization criteria was the damage to health and/or degree of suffering. This classification is given to the use of technical protocols and identification of patients needing immediate treatment.14 The Manchester System gives support and foundation to nurses for decision making, enabling the realization that the management (prioritization) of care must be according to the clinical condition of the patients rather than the order of arrival¹⁵, so the service can be done more safely because it follows a predetermined flowchart.

For the interviewed nurses, Manchester System is extremely useful, safe, fast and effective. After implementing this system, the respondents noted positive changes with regard to the dynamics of care. Nevertheless, during the interviews, many of the professionals reported difficulties not only in the applicability of the Manchester System protocol, as well as the structural and procedural factors that directly affect the quality of care and veracity of the protocol.

In the hospital studied during the research, the information system did not have all the necessary discriminating. According to Mackaway, in the absence of discriminators the system classifies patients as non-urgent.¹¹

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In data collection, a great demand for people without urgent and emergency profile was observed looking for that service to resolve a low complexity problem, creating the problem of overcrowding. This is observed not only in the city of Fortaleza, but throughout Brazil. One of the alternatives found to reduce this overcrowding would be to create internal and external pacts for patients service warranty on primary and secondary care. Thus, no patient will be dispensed without being serviced, that is, without being responsibly received, sorted and routed to the reference health unit.

In the hospital studied, the patient record data is held in the reception in computerized form through the Emergency Care Register (RAE), then the patient is taken to the classification sector, where nurses have access to this file by the institution's information system, thus advancing the process because the nurse timely performs the classification, print the form and forwards the patient to the clinical specialty. information in the Emergency Care Record (ERA) should be carried out in a consistent, clear, objective and complete way, containing information relating to the main situation and abuse, brief history, physical examination, vital signs and the rating assigned to the patient, 18 The Emergency Care Register (RAE) is of fundamental importance to have a reliable classification.

For the Ministry of Health, the classification is according to levels: Red: Priority 0 - emergency need immediate care; Orange: Priority 1 - very urgent, care in 10 min; Yellow: Priority 2 - urgent care in 60 min; Green: Priority 3 - little urgent care in 120 min; Blue: Priority 4 - low complexity consultations - care in 240 Min.⁴ assessment is recorded on the card of the Emergency Service registration, but may change if the patient suffers medical condition changes. This is accomplished through a systematic re-evaluation performed by the nurse, if the patient is not met in the determined time.6,19

To carry out an effective risk classification system, it is important that the multidisciplinary team is well trained, seeking a more supportive care, and strengthening the link between professionals and patients, promoting improvements in the care of these services. ²⁰ In this study, negative points have been reported about the multidisciplinary team, for example, the lack of qualification of some professionals, damaging the systematic protocol.

CONCLUSION

In the speeches of the interviewees it was highlighted that the Manchester System, when used properly, provides many benefits to the institution and professionals. patient, However, it is necessary that the entire multidisciplinary team involved is trained and committed to follow the protocol correctly, thus reducing the waiting time of care. In addition, the need for physical structure that helps the professional and facilitate their work, was also placed highlighted by nurses. It is noteworthy that the scenario of this study is included in the Humanization Program to participate in the Program of Collaborators Centers and several other programs with humanitarian initiatives: Education Project for Escorts, **Project** Development and Human Resources Training, Critical Patient Management Project and SOS Emergency Program recently, and quality care prioritizes access of prioritizing the reception with risk classification.

There is a need for improved training of nurses through a more complete and dynamic course about Manchester Risk Classification System so they may act in that area more safely and effectively. It is believed that the thematic reception with risk classification should be emphasized, especially in nursing journals, being an area of expertise of nurses in which there was recognition of the knowledge of these professionals in the "clinical nursing and emergency".

REFERENCES

- 1. Chiara O, Cimbanassi S, Pastore Neto M. Protocolo Para Atendimento Intra-Hospitalar. Rio de Janeiro: Elsevier; 2009.
- 2. Richardson DB. Reducing patient time in the emergency department: most of the solutions lie beyond the emergency department. Med J Aust. 2003; 179(10):516-7.
- 3. Dal Pai D, Lautert L. Suporte humanizado no pronto socorro: um desafio para a enfermagem. Rev bras enferm [Internet]. 2005; [cited 2013 Dec 11]; 58(2):231-4. Available from: http://www.scielo.br/pdf/reben/v58n2/a21
- 4. Brasil. Ministério da Saúde. Acolhimento com avaliação e classificação de risco Brasília: DF; 2004.
- 5. Prefeitura Municipal de Fortaleza. Protocolo de acolhimento com classificação de risco. Fortaleza; 2008.
- 6. Brasil. Ministério da Saúde. Acolhimento com avaliação e classificação de risco nos

Nursing knowledge and practices about the...

serviços de urgência e emergência. Brasília: DF: 2009.

- 7. Brasil. Ministério da saúde. Acolhimento nas práticas de produção de saúde. Brasília: DF; 2008.
- 8. Souza CC. Grau de concordância da classificação de risco de usuários atendidos em um pronto-socorro utilizando dois diferentes protocolos. Belo Horizonte: Universidade Federal de Minas Gerais; 2009.
- 9. Freitas P. Triagem no serviço de urgência: Grupo de Triagem de Manchester. 2.ed. Portugal: BMJ Publishing Group. 2002; 149.
- 10. Pinto Júnior D, Salgado PO, Chianca TCM. Validade preditiva do Protocolo Classificação de Risco de Manchester: avaliação da evolução dos pacientes admitidos em um pronto atendimento. Rev Latino Am Enferm [Internet]. 2012; [cited 2013 Dec 111;20(6):1041-7. Available from: http://www.scielo.br/scielo.php?pid=S0104-11692012000600005&script=sci_arttext&tlng= <u>pt</u>
- 11. Mackaway-Jones K, Marsden J, Windle J. Emergency Triage: Manchester Triage Group. 2. ed. [S.I]: Paperback; 2006
- 12. Bardin L. Analise do conteúdo. Edição Revista e Atualizada. Lisboa: Edições 70; 2009.
- 13. Brasil. Ministério da Saúde. Conselho Nacional de Saúde. Comissão Nacional de Ética em pesquisa CONEP. Resolução nº 466/2012: sobre pesquisa envolvendo seres humanos. 2012; 03.
- 14. Brasil. Ministério da Saúde. Secretaria de Atenção a Saúde. Núcleo Técnico da Política Nacional de Humanização. HumanizaSUS: Documento base para gestores e trabalhadores do SUS. 2ª Edição. Brasília: DF; 2008.
- 15. Scoble M. Implementing triage in a children's assessment unit. Nurs stand. 2004; 18(34):41-4.
- 16. Brasil. Ministério da Saúde. Política Nacional de Atenção as Urgências. Brasília: DF; 2006. 256.
- 17. Santos Júnior EA, Lima DP, Rocha AFS, Almeida CT, Oliveira SCD, Andrade BQ, et al. Acolhimento com classificação de risco Prefeitura de Belo Horizonte / Secretaria Municipal de Saúde [homepage internet]. [cited 2013 Dec 11]. Available from: http://www.pbh.gov.br/smsa/biblioteca/protocolos/AcolhimentoClassificacaodeRiscodasUp asdeBH.pdf
- 18. Toledo AD. Acurácia de enfermeiros na classificação de risco em unidade de pronto socorro de um hospital municipal em Belo Horizonte. Belo Horizonte (MG): Escola de Enfermagem/UFMG. 2009; 138.

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Nursing knowledge and practices about the... 19. Coutinho AAP, Cecilio LCO, Mota JAC. Classificação de risco em serviços de

Minas Gerais. 2012; 22(2):188-98. 20. Baggio MA, Callegaro GD, Erdmann AL. Compreendendo as dimensões de cuidado em uma unidade de emergência hospitalar. Rev bras enferm [Internet]. 2008 [cited 2013 Dec 552-7. Available from: 11];61(5): http://www.scielo.br/pdf/reben/v61n5/a04v 61n5.pdf

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