Revista de Enfermagem e Atenção à Saúde
REAS

ORIGINAL ARTICLE
DOI: 10.18554/reas.v10i1.4210
e202108

THE MANCHESTER PROTOCOL AS A TOOL FOR IMPROVING EMERGENCY SERVICES

O PROTOCOLO DE MANCHESTER COMO FERRAMENTA DE MELHORA DOS SERVIÇOS DE EMERGÊNCIA

EL PROTOCOLO DE MANCHESTER COMO HERRAMIENTA PARA MEJORA DE LOS SERVICIOS DE EMERGENCIA

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How to cite this article: Morais LF, Arruda CB, Xavier AT, Cabral JVB. Manchester protocol as a tool for improving emergency services. Rev Enferm Atenção Saúde [Internet]. 2021 [access in____];10(1):e202108. doi:10.18554/reas.v10i1.4210

ABSTRACT

Objective: To describe the benefits of using the Manchester Protocol in hospital emergency services perceived by classifier nurses. **Method**: This is a descriptive-exploratory cross-sectional study with a quantitative approach, carried out with nurses in the emergency unit of a high-complexity hospital in the city of Recife/PE **Results**: It was found that 80% of respondents perceived benefits for the patient. and for the improvement of the service routine, of which 90% found a reduction in the waiting time for care, 70% indicated a reduction in mortality after the implementation of the risk classification and improvement in user satisfaction (40%) and in the professional/ patient (20%). **Conclusion**: It was evidenced that professionals know and claim that the Manchester Protocol has a great impact,

Descriptors: Emergency; Reception; Nursing; Risk rating.

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RESUMO
Objetivo: Descrever os benefícios do uso do Protocolo de Manchester em serviços hospitalares de emergência percebidos pelos enfermeiros classificadores. **Método**: Trata-se de um estudo transversal descritivo-exploratório de abordagem quantitativa, realizado com enfermeiros da unidade de emergência de um hospital de alta complexidade da cidade do Recife/PE **Resultados**: Verificou-se que 80% dos entrevistados perceberam benefícios para o paciente e para a melhoria da rotina do serviço, dos quais 90% verificaram redução no tempo de espera para atendimento, 70% apontaram redução na mortalidade após a implementação da classificação de risco e melhora na satisfação do usuário (40%) e na relação profissional/paciente (20%). **Conclusão**: Foi evidenciado que os profissionais conhecem e afirmam que o Protocolo de Manchester tem um grande impacto, quando se trata de benefícios e melhor mecanismo de gerenciamento, além da diminuição do risco de agravamento à saúde dos pacientes.
Descritores: Emergência; Acolhimento; Enfermagem; Classificação de Risco.

RESUMEN
Objetivo: Describir los beneficios de utilizar el Protocolo de Manchester en los servicios hospitalarios de emergencia percibidos por la clasificación de enfermeras. **Método**: Este es un estudio descriptivo-exploratorio de corte transversal con un enfoque cuantitativo, realizado con enfermeras en la unidad de emergencia de un hospital altamente complejo en la ciudad de Recife / PE **Resultados**: Se encontró que el 80% de los entrevistados percibieron beneficios para el paciente y para la mejora de la rutina del servicio, de los cuales el 90% encontró una reducción en el tiempo de espera para la atención, el 70% indicó una reducción en la mortalidad después de la implementación de la clasificación de riesgos y la mejora en la satisfacción del usuario (40%) y en el paciente (20%). **Conclusión**: se evidenció que los profesionales saben y afirman que el Protocolo de Manchester tiene un gran impacto, en lo que respecta a los beneficios y un mejor mecanismo de gestión, además de disminuir el riesgo de empeorar la salud de los pacientes.
Descriptores: Emergencia; Albergar; Enfermería; Clasificación de Riesgo.

INTRODUCTION

Triage with risk classification involves a tangled decision-making process, justified by the creation of several classification systems, in order to help nurses in the decision when classifying the severity of each case. Briefly, these systems aim to reduce the user's waiting time, by prioritizing the care of more severe cases, whose prognosis tends to be more complex due to delays in care.[1]

In 2004, the National Humanization Policy (NHP) was implemented in Brazil, whose guiding principle is the enhancement of the subject and the strengthening of the relationship between user and worker. This policy consists of a set of proposals, with the purpose of promoting population health through guiding values of autonomy and protagonism of the participants, as well as collective participation in health practices.[2]

In 2014, the Ministry of Health (MS) released Ordinance 1442, which

implemented the Reception with Classification of Risk (ACCR) in emergency services. ACCR was implemented in emergency services, with the purpose of excluding the logic of first-come-first-served care. Classification is carried out exclusively by trained nurses, while reception is done by any health professional. In Brazil, risk classification is done using the Manchester Protocol (PM), which, unlike other classification systems, aims to improve the bond between professional and user, through qualified listening.[3]

The PM consists of classifying patients according to their most serious health needs. This classification follows a pattern that consists of: identifying the health problem, following with critical thinking about the degree of need for care and, finally, the decision of the patient's waiting time, according to the clinical condition presented at the time of the evaluation.[4]

Risk classification according to PM works with a color versus time system, where: Red – emergency, immediate assistance; Orange – Very urgent, service within 10 minutes; Yellow – urgent, patient can wait up to 60 minutes; Green – Not very urgent, waiting up to 120 minutes; Blue - Not urgent, and can wait up to 240 minutes to receive care.[5]

For the ACCR to be implemented, it is necessary to adapt the physical area and organize the emergency sector. According to the MH, the sector focused on emergency care should be divided into axes capable of showing the level of severity of the patient. At least two axes representing the severity of the patient must be implanted: red (area intended for patients classified as medium and high risk of life) and blue (space aimed at patients who are at low risk of life but need medical evaluation).[2]

The PM is considered a tool that allows the easy identification of critical/severe patients in urgent/emergency units. The service becomes more organized and capable of treating all patients safely, without exclusion and in accordance with the real need for priority care, a fundamental fact in the reality of Brazilian overcrowding.[6] In addition, the operationalization of the protocol occurs by using flowcharts, which makes easier the work of assessing and classifying the patient by severity.[7]

Considering the reception with risk classification that was implemented in a certain emergency service, in order to provide care according to the most serious medical needs, excluding the order of arrival, the need to research the benefits obtained through the protocol used in emergencies is justified. It is expected that nurses find that the institution has achieved

improvements in the quality of care after implementing the ACCR and using the PM, assuming that there was greater scientific support in the initial assessment and in prioritizing the need for interventions, according to the severity and risk of patient's life.

The identification and analysis of the benefits that can be perceived by nurses in relation to the implementation of the PM can optimize and spread its application in health services, improve and raise awareness of the care and reception of the population, as well as reduce the culture of institutional resistance in the implementation of risk classifications. Thus, this study aimed to describe the benefits of using PM in hospital emergency services perceived by classifier nurses.

METHOD

This is a descriptive-exploratory cross-sectional study with a quantitative approach, carried out with nurses from the emergency unit of a high complexity hospital in the city of Recife/PE. All 14 nurses assigned to the general emergency in the two existing work shifts (day and night) were included. Of these, eight agreed to participate in the survey and were interviewed.

Data were collected through a checklist instrument, containing sixteen objective questions which characterized the professional's profile (gender, age, degree and academic specialty, working time, number of contracts) and described aspects related to the PM (benefits of using the protocol, routine use, knowledge about the protocol and national humanization policy).

Data collection took place in October 2018, without prior scheduling; however, with awareness of the occurrence of the research, since there was agreement and communication by the nursing management. The instrument was presented to each participant in a private manner and could be answered without a set time for return. Meanwhile, the researcher remained in the room, awaiting the delivery of the duly answered checklist. The database was created using the Microsoft Excel® 2010 program, and analyzed according to simple descriptive statistics (frequency and percentage).

The research took place with the consent of the professionals, by signing the Informed Consent Term (TCLE), after authorization from the service and approval by the Ethics and Research Committee under CAAE: 02363018.6.0000.5200 and Consubstantiated Opinion nº 3.020.206. The ethical commitment of the use of their data was ensured according to resolution 466/12 of the National Health Council (CNS).

The study results were described in Tables, regarding the sociodemographic

characterization and self-reported aptitude of the participants (Table 1), assessment of knowledge about the Manchester Protocol (Table 2) and benefits perceived by nurses regarding the use of the Manchester Protocol (Table 3).

RESULTS

The study sample consisted of eight nurses, of which 100% (8) were female and had been working in the emergency service for over 6 years; 70% (5) were over 50 years of age. With regard to academic training, 20% (2) described not having completed a postgraduate course, while 80% (6) reported having completed postgraduate studies. All postgraduate studies (100%) were referred as *lato sensu* and none (0%) as *strictu sensu*.

On the number of employment relationships, 50% (4) reported having a single hospital bond and 50% (4) reported having two hospital bonds, with no participant (0%) having equal or greater than three jobs. As for the training to use the PM as reception in emergency services, 100% (8) answered that there was qualification and training on how to handle the PM (Table 1).

Table 1- Sociodemographic Characterization and Referred Aptitude of Participants

Variables	Category	N=8	%
Gender	Feminine	8	100%
	Male	-	-
Age (in years)	30 - 40	-	-
	40 - 50	3	30%
	> 50	5	70%
Emergency Working Time	2 - 4 years old	-	-
	4 - 6 years old	-	-
	> 6 years	8	100%
Postgraduate studies	Yes	6	80%
	No	2	20%
Number of Employment bonds	1 Hospital	4	50%
	2 hospitals	4	50%
	>3 Hospitals	-	-
Qualified to Work on Risk Classification?	Yes	8	100%
	No	8	-

Source: authors, 2020.

Regarding the nurses' knowledge about PM, it was found that 8 (100%) claim to know the levels of urgency established by the protocol, subdivided by colors, based on severity, 80% (6) reported having knowledge about the NHP of the SUS (Table 2).

Table 2- Manchester Protocol Knowledge Assessment

Variables	Category	N=8	%
Knowledge of Urgency Levels?	Yes	8	100%
	No	-	-
Do you know the National Humanization Policy (PNH)?	Yes	6	80%
	No	2	20%

Source: authors, 2020.

Regarding the benefits perceived by nurses with the use of PM, it was found that 80% (6) of respondents perceived the occurrence of benefits for the patient and in relation to the improvement of the routine of the emergency service. Of the respondents, 70% (5) assured that with the use of the PM, all patients are treated according to their risk/severity and that they verified a reduction in the incidence of mortality in the service after the implementation of the risk classification. It was found that there is still a difficulty in understanding patients in relation to waiting time, as 80% (6) of nurses claim to realize that patients do not understand the classification criteria and their relationship with the time that should be expected for the service (Table 3).

According to the benefits that were perceived in relation to the patient, 3 (40%) agree that there was a decrease in sequelae; 40% (3) point to an improvement in satisfaction with the service and 20% (2) believe that there were benefits in the professional/patient relationship. Regarding the emergency service, 90% (7) stated that there was a benefit in the waiting time item, which was reduced (Table 3).

Table 3- Benefits Perceived by Nurses using the Manchester Protocol

Variables	Category	N=8	%
Benefits to Patients?	Yes	6	80%
	No	2	20%
	I do not know	-	-
Benefits to the Emergency Routine?	Yes	6	80%
	No	2	20%
	I do not know	-	-
Does it ensure that everyone is assisted as per the Risk?	Yes	5	70%
	No	3	30%
	I do not know	-	-
Was there a reduction in the Incidence of Mortality after the Implementation of the Risk Classification?	Yes	5	70%
	No	2	20%
	I do not know	1	10%
Are there difficulties for patients to understand the time/wait?	Yes	6	80%
	No	2	20%
	I do not know	-	-
Perceived Benefits in Relation to the Patient	Decreased sequelae	3	40%
	Satisfaction with service	3	40%
	Improvement in the professional/patient relationship	2	20%
Perceived Benefits Relating to Emergency Service	Less waiting time	7	90%
	Decreased demand	-	-
	Improvement in qualification	1	10%

Source: authors, 2020.

DISCUSSION

It was found that all respondents were female, aged over 50 years and with more than 6 years of experience/work in emergency services. These findings are corroborated by other studies, which highlight nursing as a predominantly female profession[1-3], over the age of 50[8]; also, with significant professional length of service.[9] It is important to point out that with the advance in number and access to higher education in Brazil, health courses present a significant demand, with the nursing course being one of the highlights in this scenario, which points to an age transition in the profession.

With regard to training, the majority reported having a *lato sensu* postgraduate degree. The result of this variable does not corroborate the finding of another study[10], since only 19.7% of the participants completed a postgraduate course. The search for improvement and qualification after graduation is still heterogeneous in the country; however, there is a growing demand for specialization courses, offered

in classroom or distance modalities. In addition, the important role of the SUS in the permanent education of its employees is highlighted through partnerships with educational institutions and organizations for the promotion and qualification of professionals who are at the cutting edge.

When it comes to the number of employment relationships, half have one to two jobs. In a study carried out in the state of Rio Grande do Norte, also in the northeast region[7], it was seen that most respondents report having the same number of jobs as the study in question. This fact presents the reality of most nursing professionals in Brazil, as it reflects the need for another employment relationship due to low wages and often unfavorable working conditions.

Regarding the training to work on risk classification, all respondents reported being trained. It appears that the nurse has been responsible for the ACCR procedure supported by protocols. So, according to the PNH booklet, one of the necessary prerequisites for the implementation of CR is the qualification of the team of professionals who will be part of the reception, through specific training and use of pre-established protocols.[11] It is noteworthy that for to become a classifier, the nurse must be trained and monitored periodically according to the classification tool, as this will obtain qualification for handling the instrument and also for applying clinical reasoning, making the process less mechanized and more humanized.[12]

It was found that the entire sample has correct knowledge about the urgency levels described by the PM based on the severity and signs and symptoms of each patient. The ACCR guideline requires the user to be welcomed into the hospital service and treated according to pre-established risk criteria, which, through the nursing consultation, allow the professional to arrive at a classification of the potential risk of each case, according to color system.[3] This understanding is crucial for daily work, as it allows professionals to streamline their practice and determine a safe flow of care.

It was observed that most recognize the NHP of the MS and that its application allows the SUS principles to be put into practice in the daily life of health services. The PNH resulted in significant changes in emergency services, in which the forms of conduct were changed. The construction of public health policies in recent decades emphasizes the need to implement good health practices aimed at comprehensive care. From this perspective, the ACCR service contributes to adequate care in health facilities.[4]

For some authors, there is still difficulty when it comes to nurses'

knowledge in risk classification in relation to the PNH, which proposes that the ACCR should be given to all users, even those in non-serious cases and who may have their problems solved in a basic health unit. The knowledge and integration of the classification as an integral part of the PNH is essential, as only the use of the PM without the PNH becomes insufficient, as together they involve signs, symptoms and cultural and social aspects, which can be a fundamental point for the proper risk assessment of each person in a different way.[6,13]

It was possible to prove that after implementing the PM, benefits were perceived by nurses, both in relation to the patients' aspects and in the institution's routine. The implementation of risk classification brings positive contributions in the context of health care[14], facilitating care, being an important tool in prioritizing severe cases, providing security for nurses and patients, as they have already been evaluated previously while they are awaiting medical attention.[11.6]

According to the nurses' perception, the PM ensures that all patients are treated according to their real risk. From the ACCR, professionals have a better perception of patients at higher risk, which can be optimized with the use of the protocol, making this an important and necessary tool in practice in the face of clinical problems.[10]

Another benefit fact pointed out by the nurses was the decrease in the incidence of mortality after implementation of the protocol, since, according to the risk classification policy, the professional must reassess the patient, to see if there was an improvement or worsening of the case and, if necessary, change the initial color system and reclassify the patient in case he/she presents a worsening of the clinical condition. In another study[15] after the implantation of the PM, it can be observed that there was a decrease in the mortality of patients who were classified, contributing to a reduction in deaths due to lack of care.

It is noteworthy that there is still a difficulty in understanding patients with regard to the waiting time for care; however, in a study in Minas Gerais,[16] 87% of surveyed users were satisfied with the service, with regard to the time of wait to get the service. It is important to mention that most occupants of the emergency could have their problem solved in primary care, thus contributing to the reduction of long waiting lines for those who really need the emergency service.

From the perception of the respondents in this study, in relation to the patients, it was found that there was a decrease in sequelae, satisfaction with care and improvement in the professional/patient

relationship. According to a study by Souza et al.[17], after the implantation of the PM, users were differentiated according to their level of urgency, thus reducing the great demand for services; and those classified as blue were instructed to seek primary care to solve problems, thus reducing the waiting time for care in non-serious cases.

For nurses in an emergency room in the southern region of Brazil, prioritizing care for patients at risk of harm is seen as one of the positive contributions of the PM, ensuring emergency care and reducing the sequelae and risks of aggravation resulting from the prolonged waiting time. In addition, it contributes to the user feeling safe[11], as qualified listening is performed and, thus, a closer relationship between the user and the health team, ensuring that he/she does not leave the service without receiving some type of care.

It is worth noting that for there to be the construction of welcoming between users and workers and a quality in this relationship, it is necessary to implement risk classification systems/programs, thus being able to reach better levels in the quality of care. The PM is an example of an instrument that allows the achievement of good results and has been used in several countries around the world, with different realities. Its reliability is considered acceptable and there is agreement on the benefits resulting from its implementation.[18-20]

CONCLUSIONS

Knowing the perception and expectations of professionals who provide care in the ACCR service is an important element for evaluating emergency services. In the present study, it was evidenced that professionals know and claim that PM has a great impact, when it comes to benefits and a better management mechanism, in addition to reducing the risk of worsening the health of patients.

It is noted that nursing professionals are concerned about the quality of ACCR in emergency services; thus, it is important to disseminate studies on the subject, so that they can contribute to a better planning and effectiveness of this system. In addition, institutions that have not yet implemented risk classification can base themselves on shared experiences in the scientific space, adapting them to their real needs.

The sample size and the fact that the study was carried out in only one hospital stand out as limitations, which despite being a reference for clinical and traumatic emergencies, may not accurately reflect the characteristics of other health services.

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RECEIVED: 12/18/2019
APPROVED: 01/27/2021
PUBLISHED: 06/2021