

RECORDS OF INTER- HOSPITAL TRANSFER OF PERSON IN CRITICAL SITUATION

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Abstract: Inter-hospital transfers (ITH) are procedures that require prior preparation by nurses to ensure safety during the process. In order to prevent the risk associated with transfers, institutions must implement a specific transfer plan, with an efficient system of material, human and documentation resources. Nursing records (RE) must reflect the nurse's critical thinking, describe the problems that the user presents, the nursing interventions carried out and the results achieved sensitive to nursing interventions.

A continuous quality improvement project was developed through action research methodology, with the objectives of analyzing nursing records relating to HIT of people in critical situations; implement strategies to improve the records analyzed and evaluate nurses' satisfaction with the interventions implemented.

A "check-list" was used to verify data recorded in the clinical files of users undergoing HIT. A "standard" record, pre-structured and editable in the computer program used, was made available to nurses in a medical-surgical emergency service in Portugal. After implementing the interventions, an electronic questionnaire was administered to nurses to assess their satisfaction with the process.

The content of the RE of transferred users was evaluated, and it was possible to verify the existence of omission/lack of information on the preparation of inter-hospital transfers in the RE. The reasons associated with this non-existence are associated with issues of time management and poor prioritization of care by nurses. After implementing the interventions, the nurses evaluated them as positive and reported being satisfied with them.

Overcrowding in emergency services due to a large influx associated with a lack of human resources, the need to develop skills such as time management, can lead to inadequate documentation of care.

Keywords: Nursing; Specialist Nurse; Person in Critical Situation; Nursing Records; Emergency Service.

INTRODUCTION

A Person in Critical Situation (PSC) is "one whose life is threatened by failure or imminent failure of one or more vital functions and whose survival depends on advanced means of surveillance, monitoring and therapy" (Regulation No. 429/2018, 2018, p. 19362). For several reasons, the PSC finds itself faced with the need to be transferred to other health units to receive the care that its situation requires.

Thus, PSC transfers have different definitions according to the place of origin, being classified as: primary, when transferred from the place of sudden illness and/or accident, being the same, in mainland Portugal, the responsibility of the National Institute of Medical Emergency (INEM). The secondary one, being the responsibility of the health institution where the PSC is located, being the latter's responsibility to make the request to the receiving unit (Vasconcelos et al., 2019). Secondary transfer can also be classified as intra-hospital, when it is carried out within the health institution itself, or Inter-Hospital Transfer (ITH), when it involves transfer to another hospital unit, which is where this work will focus.

IT must be considered as it is a time of great vulnerability and instability for the user (Almeida et al., 2012).

In order to prevent the risk associated with transfers, institutions must have a specific PSC transfer plan, with an efficient system of material, human and documentation resources (Pedreira et al., 2014).

The PSC transfer must be structured in three phases: decision; planning; and implementation.

At the stage of deciding to transfer a user,

the responsibility lies solely with the doctor. Decision-making is a complex process that involves choosing between one or more alternatives that allow achieving the desired result, and there must be a prior assessment of benefits and risks (OM & SPCI, 2008).

The planning phase must be carried out by the medical and nursing team, and must include: the choice and contact with the destination service; analyzed the distance to travel and transport time; select the appropriate team and means of transport; selection of appropriate means of monitoring, equipment and therapy; definition of physiological objectives to be maintained during transport; prediction and anticipation of possible complications. Transport must not be initiated without the user's clinical status being optimized, and solutions anticipated for all diagnostic and therapeutic interventions that may be necessary (OM & SPCI, 2008).

Given this scenario, it is important that teams are trained and qualified to minimize possible unforeseen events, as they will be able to anticipate, manage and treat any technical and medical complications that may arise during the event (Graça et al., 2017; Vasconcelos et al., 2019).

FRAMEWORK

In the preparation of HITs, the importance of clinical records made, particularly nursing records, in order to guarantee continuity of care and ensure safety and quality during transport, as it is not always the nurse who accompanies the user at the place of origin that accompanies you during the HIT process to the reception location.

Documentation of nursing care has evolved from notes in manual format to now be part of the user's process and a reflection of the work carried out by nurses, constituting an indicator of the quality of care provision (Franco, Akemi & Inocento, 2012).

The Order of Portuguese Nurses (OEP) (2014, p. 1) defines nursing records (RE) as the "set of information produced by nurses in clinical practice, in which they compile information resulting from nursing care needs (autonomous interventions), as well as all information resulting from the decision-making process, from other technicians and implemented by the nurse (interdependent interventions) and all other information necessary for continuity of care".

Matsuda et al. (2006) add that, since there are several professionals involved in providing care to users, it is essential to guarantee their continuity, through communication and sharing of information regarding the user's condition. Thus, RE must reflect the critical thinking of nurses, describe all the problems they present, the nursing interventions carried out, as well as the results achieved sensitive to nursing interventions (Pereira, Nascimento & Gomes, 2011).

The International Classification for Nursing Practice (ICNP) is the language that is made available in computer systems for nursing records in Portugal, specifically "SClinico®", and aims to standardize concepts and catalog diagnoses, results and interventions, creating a common terminology to all nurses (Leal, 2006). "SClínio®" is a unique and common application for all health professionals from different hospital units, which allows access and sharing of information through the user's clinical process, which aims to be transversal with regard to diagnoses and nursing interventions. This way, it allows the analysis, interpretation and comparison of data, both at the level of the organizational health unit and at a national level, being an excellent tool for obtaining indicators to evaluate the quality of care provided (Shared Services of the Ministry of Health, 2019).

However, there is consensus in several studies that nurses carry out care that they

then do not record in the record. The records are interpreted as unnecessary bureaucracy and on days when there is a greater flow of activity, these are the days when the records show greater omission of information (Marinis et al., 2010; Santos, 2019; Paiva, Amaral & Moreira, 2021). Failures in the preparation of RE are justified by the shortage of nurses, time, organization and the type of form for recording in the case of records made in paper format (Linch, Muller-Staub & Rabelo, 2010).

This dissonance between the care provided and what is actually recorded by nurses, associated with technological development, led to the implementation of a Nursing Information System (SIE) that allowed for improvements in the collection, processing, storage and transmission of various information (Azevedo & Sousa, 2012). SIE allow for an improvement in the management of all areas of a health unit, as it works with information in digital format instead of paper, as well as the creation of records in a standardized way, reducing data duplication, improving accessibility information, as it is easily accessed at any point with access to the computer network and contributes to the visibility of nursing care (Vieira, 2018).

MATERIALS AND METHODS

TYPE OF STUDY

The study carried out focused on a project to continuously improve the quality of care, through action research methodology, and was developed in three phases: the first in which a documentary study was carried out to analyze nurses' records in HIT situations; in phase two where two improvement strategies were planned and implemented to resolve the identified problems.

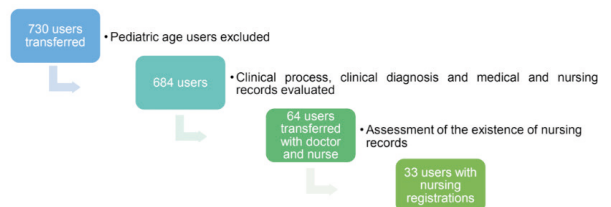
These strategies were: the construction of a "standard", pre-structured and editable record in "SClinico[®]" and carrying out online

training on how to access the "standard", pre-structured and editable record built and make it available for registration on the "SClinico[®]" platform;

In phase three, the interventions were evaluated, from the nurse's perspective, through a descriptive study.

SAMPLE

In phase one of the study, nursing records were analyzed in the "SClinico[®]" computer application. Graph 1 shows the steps and exclusion criteria for the sample constitution process.



Graph 1 – Sample constitution process.

The sample for phase three of the study consisted of 36 nurses from a medical-surgical emergency service in the central region of Portugal. As an exclusion criterion, it was defined that only nurses providing care would be consulted in phase three, thus excluding the nurse manager and the element that assumed service coordination functions. Elements who responded that they did not carry out PSC HIT were also excluded. Thus, out of a population of 48 nurses, 75% of the nursing team participated.

DATA COLLECTION

The data collection instruments used in this study were a "check-list" and an electronic questionnaire constructed by the researcher.

The "check-list" was used for diagnostic documentary research, which was carried out in phase one of the study. The analysis of computerized nursing records in "SClinico[®]" made it possible to extract information

from the PSCs that were transferred in the period from April 1st to September 30th, 2022. 30 parameters were evaluated based on recommendations for the transport of critically ill patients (OM & SPCI, 2008).

The second data collection instrument was a questionnaire, used in the third phase of this study. The questionnaire invited participating nurses to answer 6 open-response and 7 closed-response questions, as well as 4 Likert-type questions, with five possible answers (totally disagree, disagree, neither agree nor disagree, agree and totally agree), with the items being scored from 1 (totally disagree) to 5 (totally agree).

FORMAL AND ETHICAL PROCEDURES

The study obtained a favorable opinion from the institution's Ethics Committee with code 15.OBS.2022. Informal consents were also obtained from all participants, guaranteeing the right to self-determination, allowing them to withdraw from participating at any time in the investigation.

RESULTS AND DISCUSSION

PHASE ONE OF THE STUDY: DOCUMENTARY STUDY

From the analysis carried out on clinical records (diagnostic documentary study) it was found that REs was scarce for the number of HIT performed. It was found that they were not a priority in clinical practice, as out of 30 parameters evaluated, no response was obtained in 9 parameters considered important for HIT to be performed safely. In 17 parameters the response percentage was less than 50% and in 4 parameters a response percentage greater than 50% was obtained, as can be seen in the data presented in table 1.

PHASE TWO OF THE STUDY: DESCRIPTIVE STUDY

The results obtained through the questionnaire addressed to nurses showed that the average age of nurses in the service was 41.69 ± 11.69 years, where the minimum age recorded was 26 years and the maximum was 65 years, with the majority female (75%). There is a higher number of generalist nurses (58.3%) than specialists. The most mentioned specialty was Medical-Surgical Nursing.

As for time in Professional Practice, nurses at the service had an average of 18.33 ± 10.82 years of experience, [4;40]. Regarding professional experience in the emergency service, nurses had an average of 11.83 ± 8.92 years, [2;29].

It can also be seen that 47.2% of respondents reported having specific training in the area of PSC. Regarding the number of transfers that nurses carried out over a period of 6 months, it was found that on average they carried out 5.58 ± 3.51 transfers [1;15].

Of the responses to the question "Do you register prior to transfers?", 58.3% responded affirmatively. When exploring the reasons why they did not perform, justifications were found associated with issues of time management, such as lack of time, but also poor prioritization of care.

These results can be explained by the fact that emergency contexts imply the need for careful and prioritized care management.

The issue of lack of time and prioritization of care is widely identified and discussed in the literature, associated with insufficient human resources. The "time spent by nurses documenting competes with the time available for direct care to clients" (Silva, 2006, p. 18). Jones (2015) also adds that immediate physiological needs in the context of urgency are prioritized to the detriment of other activities. Nurses rarely omit care due to forgetfulness, but prioritize it through

Criterion	Yes (%)	Not (%)	Not applicable (%)					
A - Ability to maintain the airway	24	3	73					
A - Tracheal intubation	21	0	79					
B - Supplemental oxygen	12	0	88					
B - Artificial ventilation	15	0	85					
C - Vital signs	55	0	45					
C - Hemorrhages	6	3	91					
D - Seizures	6	3	91					
D - Glasgow Coma Scale	21	0	79					
D - Pupils	12	0	88					
D - Sedation	6	3	91					
E - Remove clothes	48	0	52					
E - Maintain body temperature	3	0	97					
F - Bladder probe	61	0	39					
F - Nasogastric tube	18	0	82					
F - Inform family members of the transfer and final destination	6	0	94					
G - Provide comfort to PSC	0	0	100					
G - Provide comfort to the family	0	0	100					
H - Reason for admission	67	0	33					
H - Admission date	0	0	100					
H - Personal background	0	0	100					
H - Allergies	0	0	100					
H - Reason for transfer	0	0	100					
H - Last meal	0	0	100					
I - Assess the back of the body	0	0	100					
Booty	9	0	91					
Deliver clothes and valuables to the family	48	0	52					
Sealed transfer case	0	0	100					
	Yes (%)	Not (%)	Guedel tube (%)	Not applicable (%)				
A - Airway adjuvants	0	0	6	94				
	Yes (%)	No (%)	Nose glasses (%)	Face mask (%)	Venturi mask (%)	High output mask (%)	Non-invasive ventilation (%)	Not applicable (%)
B - Oxygenation device	0	0	3	3	3	0	9	82
			Peripheral Venous Catheter (%)	Central Venous Catheter (%)	Not applicable (%)			
C - Vascular access			88	9	3			

Table 1 – Nursing records

decision-making after assessing the patient's clinical situation (Harvey et al., 2018). Overcrowding in EDs due to a large influx associated with a lack of human resources can lead to situations in which nurses do not have the capacity to combine the provision of care and the preparation of ER. In these cases, and as identified in the nurses' responses, the priority is always providing care to the user. Also, the fact that there is a high demand for and consumption of healthcare in these units means that resources, which in themselves are scarce (material and human), make effective management more difficult. For this problem, a solution was planned to create a "standard", pre-structured and editable record that would reduce the time in preparing the record, and would focus on the aspects considered important for carrying out HIT.

When nurses were consulted about the interventions implemented, they assessed their satisfaction with four statements, having presented an average satisfaction rate above 50% for all items.

Table 2 shows the nurses' responses to the statements made, and it is possible to verify that the nurses almost completely agreed with the items.

The statement "I started using this "standard", pre-structured and editable record" was the one that obtained the lowest value, which reveals that it is still necessary to raise nurses' awareness of the importance of the topic. Awareness raising implies that the person is aware of the importance of changing behaviors, because "when we ask members of a community to adjust their attitudes and adopt certain behaviors, they will be more receptive to the messages if they know what that means and if they believe that behavioral change will, in fact, help" (Andrade et al., 2020, p. 133).

Affirmation	M	s
The training action was clear and explicit	3,83	0,74
I consider this topic important for nursing practice	4,81	0,40
I find the "standard" register, pre-structured and editable, useful	4,53	0,61
I started using this "standard" register, pre-structured and editable	3,69	0,92

Table 2 – Average satisfaction value related to the statements

Subtitle: m- average; s- standard deviation.

LIMITATIONS

As a limitation to the study, we can identify the small sample size, as well as the nurses' lack of motivation to collaborate in continuous quality improvement projects.

FINAL CONSIDERATIONS

The present study allowed us to understand the reality in this service, which was previously unknown, and to identify nurses' practices in relation to carrying out ER.

Through the questionnaire, it was also possible to obtain knowledge of the nurses' perspective on the topic under study, as well as obtain suggestions and improvement measures, which were later operationalized, through the application of a strategy to facilitate the preparation of RE.

The data obtained through the analysis of the RE and the application of the questionnaire were corroborated with the results described in the literature, namely the finding of omission or lack of information in the RE regarding the preparation of the PSC inter-hospital transfer. Although the majority of respondents recognized the importance of the topic, it was found that it was not implemented later.

Taking into consideration, that there was not much bibliography regarding this topic, this study allowed us to increase knowledge in this area, and could be the stimulus for continued research on this topic.

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