


ORIGINAL ARTICLE

COMMUNICATION IN THE TRANSITION OF NURSING CARE IN AN EMERGENCY DEPARTMENT IN PORTUGAL

Cidália Maria da Cruz Silva Patacas de Castro¹ 
Maria do Céu Mendes Pinto Marques² 
Célia Rodrigues de Oliveira Tavares de Vaz¹ 

ABSTRACT

Objective: to identify nurses' opinions about the transition of care at shift change in the emergency department and understand their knowledge about patient safety. **Method:** quantitative, descriptive, cross-sectional study, conducted in January 2019, in an emergency department of a hospital in the metropolitan area of Lisbon, Portugal. Non-probability convenience sample with 50 nurses. Data analysis used descriptive and inferential statistics, with the Mann-Whitney test. **Results:** information transmitted is updated (80%); there is noise that interferes with the transmission of care (84%); patient assessment in the transition of care is beneficial (84%). 50% know the international goals for patient safety; 84% agree that the ISBAR methodology contributes to patient safety. **Conclusion:** it is evident the formation of professionals and the use of standardized instruments as fundamental strategies for patient safety in the transition of care.

DESCRIPTORS: Patient Safety; Patient Handoff; Hospital; Communication; Medical-Surgical Nursing.

HOW TO REFERENCE THIS ARTICLE:

Castro CM da CSP de, Marques M do CMP, Vaz CR de OT. Communication in the transition of nursing care in an emergency department in Portugal. *Cogitare Enferm.* [Internet]. 2022 [accessed "insert day, month and year"]; 27. Available from: <http://dx.doi.org/10.5380/ce.v27i0.81767>.

¹Egas Moniz Cooperativa de Ensino Superior, CRL, Escola Superior de Saúde Egas Moniz. Almada, Portugal.

²Universidade de Évora, Escola Superior de Enfermagem S. João de Deus. Évora, Portugal.

INTRODUCTION

Health care transition refers to any moment of care delivery in which there is a transfer of care responsibility and information between providers, with the goal of maintaining continuity of care and patient safety⁽¹⁾.

Vulnerable moments of care transition for patient safety are considered those whose complexity has a higher risk of error in the passage of information, namely in cases of transfers to another level of care and shift changes in the same institution⁽¹⁾. Several authors refer those failures in this process can produce a wide variety of errors, which put patient safety at risk⁽²⁻⁴⁾.

Patient safety is a worldwide concern, which has been highlighted by international scientific organizations. In Portugal, the National Plan for Patient Safety 2015-2020 was created, following the recommendations of the Council of the European Union, as a support tool for the implementation of good safety practices⁽⁵⁾ in a process of continuous quality improvement. In this context, a standard on Effective Communication in Health Care Transition was issued, which aims to standardize good practices for effective communication between professionals, about the patient in health care transition, ensuring accurate and timely communication, reducing adverse effects and, consequently, reducing mortality⁽¹⁾. This communication should be standardized, using the ISBAR⁽¹⁾ technique: I (Identify) ; S (Situation); B (Background) and R (Recommendation).

The emergency department, given its inherent characteristics, the clinical situation of patients, its high affluence and turnover, in which there are numerous transfers, is a unique service with many challenges for effective and high-quality communication in the transition of care⁽⁶⁾.

In view of the above, we aimed to know the nurses' opinion about the transition of care during shift change in the emergency department and to understand their knowledge about the issue of patient safety.

METHOD

This is an observational, descriptive, cross-sectional, quantitative study, conducted in January 2019, in an emergency department of a hospital in the metropolitan area of Lisbon, Portugal. The hospital structure is based on three major areas: triage, outpatient, and inpatient.

The study was developed in the inpatient area which includes two distinct spaces, the Acute Multipurpose Inpatient Unit (UIPA) and the Observation Service (OS). The sample, a non-probability convenience sample, was composed of 50 nurses from a total of 74 elements. The inclusion criteria for the study were that the nurses were providing direct care and were available to participate. The exclusion criteria were the nurses who were only in the service management area and those who were absent from the service.

The instrument for data collection was a self-completion questionnaire, adapted from an existing questionnaire, which was not validated for the Portuguese population. It was composed of three parts: the first part was about socio-demographic characterization; the second part was about the opinion on the transition of care at shift change, composed of a Likert scale with 25 propositions and four positions, namely totally agree, partially agree, partially disagree, and totally disagree. In the third part, also composed of a Likert scale with 10 propositions and the same four positions, we tried to assess the sample's knowledge about the topic of patient safety. In both scales, the option to eliminate the

“neutral” or “no opinion” category was since the answers in these categories are difficult to interpret. If the sample subjects chose this scale in large numbers, it could reduce the possibility of differentiation between the data.

In developing the questionnaire, the analysis of its metric qualities was performed by assessing the sensitivity of the items and the internal consistency of the scales. No item had to be eliminated, and a Cronbach's Alpha value of 0.895 was obtained, considered as having good consistency⁽⁷⁾. Additionally, the Kaiser-Meyer-Olkin coefficient (KMO) and Bartlett's sphericity were analyzed to see if the exploratory factor analysis had validity for the chosen variables. The KMO obtained a value of 0.732, which indicates that the principal components analysis is acceptable⁽⁸⁾ and can be performed.

In the factor analysis of the questionnaire variables, whose extraction method resulted from the principal component analysis, the Varimax rotation method with Kaiser normalization was used, grouping the 25 variables from the second part of the questionnaire into four domains, and the 10 variables from the third part into three domains.

To understand if the variables are correlational, Bartlett's measure was used, presenting a significance level of 0.000. The normality of the distributions for each scale of the questionnaire was tested, through the Kolmogorov-Smirnov Test it was possible to conclude that the variables do not follow a normal distribution, at a level of significance ≤ 0.05 . We chose to use the nonparametric Mann-Whitney test for comparisons by groups and Pearson's correlation coefficient study in the opinion and knowledge variables.

In the second and third parts of the questionnaire, the answers were grouped into the categories “I agree” and “I disagree” to facilitate the visualization of the results. The statistical treatment of the questionnaire data was performed using the Statistic Package for the Social Sciences, version 26.0, using descriptive and inferential statistics with a confidence level of 95%.

All procedures inherent to this study were approved by the local ethics committee (no. 43/2018) and were in accordance with national regulations for investigations involving human subjects.

RESULTS

Of the 70 questionnaires delivered, 50 (71.43%) were returned. The sample consists mainly of female participants 41 (82%). The average age is 33.46, the median is 29.5 and the mode is 25 (12%), 25 (50%) are between 23 and 29 years old. In the distribution of the sample by years of service as a nurse, the mean is 10.67 years, the median is seven years and the mode is two years, seven (14%) and five years, seven (14%).

Of the sample, 25 (50%) have between six months and six years of service, with a maximum of 33 years, two (4%), and a minimum of half a year, one (2%). The mean number of years of professional practice in the emergency department is 7.29 years, the median is three years, and the mode is two years, eight (16%) and three years, eight (16%). Of the sample, 26 (52%) were between six months and three years of professional practice in the emergency department. Of the study participants, 40 (80%) hold a bachelor's degree and seven (14%) hold a master's degree and a specialist degree in nursing. Of these, one (14.3%) is a specialist in Rehabilitation Nursing and six (85.7%) in Medical-Surgical Nursing. Regarding the type of contract with the institution, nine (18%) are holders of public service employment contract, 39 (78%) of indefinite term employment contract and two (4%) of fixed term employment contract.

After factor analysis of the questionnaire variables, the 25 variables of the scale were grouped into four domains, namely: positive aspects of the moment of nursing care

transition, negative aspects of the moment of nursing care transition, patient assessment at the moment of nursing care transition, and the management of information obtained in nursing care transition.

Regarding the domain "Positive aspects of the moment of transition of nursing care", Table 1 shows the questions and the respective answers in absolute and relative frequency.

Table 1 - Positive aspects of the moment of nursing care transition. Lisbon, Portugal, 2019

Variables	Agree		Disagree	
	n	%	n	%
I can clarify information transmitted at shift change.	45	90	5	10
I can stay focused on the information while it is being transmitted	40	80	10	20
The way the information is being transmitted is easy to follow	40	80	10	20
The transmitted information is up to date	40	80	10	20
Sufficient information is provided to take over the care of patients	41	82	9	18
I can ask questions about things I didn't understand	43	86	7	14
The duration of the shift change is adequate	38	76	12	24
I can discuss confidential patient information	35	70	15	30
Shift information can be obtained from the patient's file	45	90	5	10
Adequate information on inpatients is provided	42	84	8	16
Information is transmitted in a structured way	38	76	12	24

Source: Authors (2019).

Included were 11 statements referring to the positive aspects of the nursing care transition moment. The sample is unanimous, with percentages greater than or equal to 70%. The majority 40 (90%) report that they can clarify information conveyed at the shift changeover, as well as being able to obtain the shift changeover information through the patient's file. The variable with the lowest percentage is having the opportunity to discuss confidential information regarding patients 35 (70%).

In the domain "Negative aspects of the transition moment of nursing care", in Table 2, it is possible to observe the questions and the respective answers in absolute and relative frequencies.

Table 2 - Negative aspects of the moment of nursing care transition. Lisbon, Portugal, 2019 (continues)

Variables	Agree		Disagree	
	n	%	n	%
The shift changeover is subject to interruptions by other events and/or service activities	46	92	4	8

During the shift change, irrelevant information to patient care is transmitted	26	52	24	48
I feel that information is not transmitted	33	66	17	34
During the shift change, I feel that I am pressured to finish quickly	27	54	23	46
It is important to redesign the structure of the shift changing process	25	50	25	50
During the shift change, there is noise that interferes with the transmission of care	42	84	8	16
During the shift change, professionals are interrupted by other professionals	43	86	7	14

Source: Authors (2019).

One of the negative aspects with the greatest consensus in the sample is the existence of noise during the transition of care, with first place being given to the reference that the change of shift is subject to interruptions by other events and/or service activities 46 (92%). Next, during the shift change professionals are interrupted by other professionals 43 (86%) and during the shift change there is noise that interferes with the transmission of care 42 (84%).

Regarding the information transmitted, 26 (52%) agree that during shift change information irrelevant to patient care is transmitted, and 33 (66%) agree that there is important information that is not transmitted.

Regarding the timing of the transition of care, 27 (54%) report that during the shift change they are pressured to finish quickly, and 25 (50%) agree that it is important to redesign the structure of the shift change.

As for the third domain "Assessment of the patient at the time of transition of nursing care", Table 3 shows the questions and their respective responses in absolute and relative frequencies.

Table 3 - Assessment of the patient at the moment of nursing care transition. Lisbon, Portugal, 2019

Variables	Agree		Disagree	
	n	%	n	%
It is possible to evaluate patients during shift change	34	68	16	32
It is important to be able to assess patients during the changeover	42	84	8	16
It is advantageous to carry out the shift change with the patient	42	84	8	16

Source: Authors (2019).

The sample is in agreement about the importance of having the shift over with the patient 42 (84%), being able to evaluate the patient during the moment 42 (84%), and that it is possible to do so 34 (68%).

The management of information obtained in the nursing care transition was the last domain found, as can be seen in Table 4.

Table 4 - Management of information obtained in the nursing care transition. Lisbon, Portugal, 2019

Variables	Agree		Disagree	
	n	%	n	%
The information conveyed is subjective	17	34	33	66
I have had to contact the nurse previously responsible for my patients to obtain more information	21	42	29	58
I always read all the written patient information given to me at shift change	24	48	26	52
I have difficulty in organizing the information to be transmitted, concerning patients with more complex health histories	39	78	11	22

Source: Authors (2019).

In the domain "Management of information obtained in the transition of nursing care", most of the sample 39 (78%) have difficulty in organizing the information to be transmitted regarding patients with more complex health history. They disagree that the information transmitted is subjective, that they have already had to contact the nurse from the previous shift to get more information, and that they always read all the written information, regarding patients, that is provided to them at shift change.

In the third part of the questionnaire, referring to knowledge about the topic of patient safety, after factor analysis of the variables, the 10 variables of the scale were grouped into three domains, namely: knowledge of the guidelines on effective communication in the transition of care, benefits of using a standardized tool in the transition of care and training around patient safety

In Table 5, you can see the variables and their respective responses in absolute and relative frequencies.

Table 5 - Knowledge of the guidelines on effective communication in the transition of care. Lisbon, Portugal, 2019 (continues)

Variables	Agree		Disagree	
	n	%	n	%
1- Domain: Knowledge of the guidelines on effective communication in the transition of care				
1.1 I know the 2017 DGS standard on "Effective communication in the transition of care"	34	68	16	32
1.2 I know the ISBAR mnemonic	38	76	12	24
1.3 I know about the international goals for patient safety	25	50	25	50
1.4 I know of other institutions where the ISBAR mnemonic is applied	22	44	28	56
1.5 I am aware of the institution's multi-sector procedure for shift changing	30	60	20	40
1.6 I know the National Plan for Patient Safety 2015-2020	24	48	26	52
2- Domain: Benefits of using a standardized tool in the transition of care				

2.1 The ISBAR methodology contributes to rapid decision making, promoting critical thinking	37	84	13	26
2.2 One of the strategies that ensures effective communication is the use of a standardized tool	39	78	11	22
3- Domain: Training around patient safety				
3.1 I have already had training around patient safety in the training department of the Hospital Center	16	32	34	68
3.2 I have already had training around 1patient safety in the ER	19	38	31	62

Source: Authors (2019).

Regarding patient safety, the sample showed some consensus, particularly regarding the knowledge of the guidelines on effective communication in care transition, the standard of the Directorate-General for Health (DGS) on effective communication in care transition, and the ISBAR mnemonic. The greatest divergence of opinion was regarding the knowledge about the international goals for patient safety, other institutions where the ISBAR mnemonic is applied, the institution's multi-sectoral procedure for the implementation of the transition of care, and the National Plan for Patient Safety 2015-2020.

In terms of the benefits of using a standardized tool in the transition of care, most of the sample agrees that the ISBAR methodology contributes to quick decision-making and promotes critical thinking. Regarding training around patient safety, most of the sample had no training in the training department of the Hospital Center or in the emergency department.

When comparing the nurses' opinions about the transition of care at shift change with the sociodemographic variables, it was found that only in the distribution by the variable "nursing specialization course", the distribution level is $p=0.120$, which shows that there are no significant differences between the variables, however, getting closer and closer to the significance value.

We tried to understand whether there are significant differences between the variables: knowledge of the topic of patient safety and the sociodemographic variables, with the variables: ever had training in the ED and in the training department, as well as with the years of performance in the ED. It was found that the sample distribution, in the comparison of has had training in the area of patient safety in the ED and years of performance in the ED is $p=0.350$. Although there is no significance ($p=0.05$), it is closer to the significance value than in the comparison with training in the training department of the hospital center with the years of performance in the ED, which is $p=0.500$.

When comparing the distribution of knowledge on the subject of patient safety with the type of relationship to the institution, it can be seen that there is a significance value of 0.039, observing that the greater the institutional relationship, the greater the knowledge.

In the distribution of the variables: have you ever had training in the ED, and have you ever had training in the training department, compared to the type of attachment to the institution, we found that they are not significant ($p=0.080$). However, it is closer to the significance value than in the comparison between having already had training around patient safety in the training department of the hospital center and the type of contract ($p=0.249$).

Pearson's correlations were used to find out how the variables nurses' opinion on the transition of care at shift change and knowledge of the patient safety issue are related to each other. There is a positive relationship between knowledge of patient safety and nurses' opinion about the transition of care at shift change: the more knowledge about patient

safety, the better the professional's opinion. This is not a significant correlation because p-value (Sig) is 0.160. In the correlation between the opinion and training variables, a positive relationship was sought, the more training the nurses have the better their opinion will be. There was no positive correlation because the p-value is 0.835 in the training held in the training department and 0.573 in the training held in the ED.

DISCUSSION

The results show that this is a very young team whose average years as nurses is 10.67 years, with 50% of the team between six and half a year as nursing professionals. This is a team whose majority are considered competent⁽⁹⁾.

As positive moments of the transition of care during the change of shift, we found that the information transmitted is easy to follow, up to date, provides enough information to assume the provision of care to patients, and the duration of the transition moment is adequate and transmitted in a structured way. The majority report that during the changeover they feel pressured to finish quickly, that irrelevant information for patient care is transmitted, as well as the existence of important information that is not transmitted. Half of the sample agrees that it is important to reformulate the structure of the shift changeover, and most that the ISBAR methodology, as a standardized tool, contributes to decision-making and critical thinking, ensuring the effectiveness of effective communication.

Several studies internationally^(2-4,6,10-12) have been developed to understand the contributions of a structured document for shift changeover to improve patient safety.

In Australia⁽¹⁰⁾, a study was developed in which a standardized nursing shift handover model was implemented, and evaluation of transition moments was performed before and after its implementation. The authors concluded that the process of care transition in the emergency department should be structured, focused on a standardized approach, including checklists, with an emphasis on nursing care and patient involvement. This strategy, which is simple and easy to implement, has the potential to provide continuity of care and improve documentation in the emergency department setting.

An identical study developed in Spain⁽⁴⁾ concluded that the contents transmitted in the transition of care in the emergency department are deficient in their content. In addition, the use of a specific Transfer model in the emergency department, standardized, based on available evidence, improves the quality of information, its efficiency and patient safety, and makes transfers more satisfactory.

In the United States of America⁽¹¹⁾ they applied a standardized instrument (SBAR), electronic, in the transition of care in patient transfer. The authors concluded that the use of the standardized electronic communication process resulted in decreased patient transfer time and increased efficiency in bed turnover, and the SBAR technique was seen as an asset to be expanded to other inpatient units.

In the Northern region of the United States⁽¹²⁾, a study on this topic showed evidence of improved communication and increased awareness of care transition practices after applying a standardized care transition tool. Nurses considered that the recommended communication tool (SBAR) was easy to use and prevented the loss of patient information more effectively than the practice used in the pre-intervention, increasing their safety, and decreasing errors.

Of the various existing methodologies, the ISBAR reporting tool has played a prominent role, and is a practice implemented in other health systems worldwide.

Most of the study sample reported that it is possible to assess patients at the time

of transition, and it is beneficial to perform this moment with the patients. The authors of a study developed in Australia⁽³⁾ recognized as positive interventions in the communication of the process of transition of care, that it should be carried out with the patient, being useful to minimize the risks of lack of communication, improve the quality and safety of inter-professional practices and support shift changes. In a quasi-experimental study⁽¹³⁾, the authors concluded that transition of care with the patient reduces the risk of omission of information, can promote an awareness of the patient's situation, visualizing him and his surroundings, reviewing indications and discussing the care plan with the patient and family, providing adequate time for clarification.

The guidelines on effective communication in care transition, namely the DGS (Portugal) standard on effective communication in care transition, the international goals for patient safety, the institution's multi-sector procedure for care transition, and the National Plan for Patient Safety 2015-2020, are not known by the whole team, showing the need for training in this area, either in-service or in the training department of the Hospital Center. There is a positive relationship between the knowledge of the patient safety issue and the nurses' opinion about the transition of care at shift change, the greater the knowledge about patient safety, the better the professional's opinion.

This study showed that the training of professionals and the use of a standardized instrument are fundamental strategies for patient safety in the transition of care, basic principles in healthcare and nursing.

As limitations of the study, we highlight the cross-sectional design, not allowing causal inferences, as well as the difficulty in obtaining nationwide research, which hinders the discussion.

CONCLUSION

The nurses in this study consider that the information transmitted during the transition of care in the emergency department is easy to follow, updated, of adequate duration and structured. They emphasize as negative aspects the noise coming from other professionals that interferes with the transition, as well as the existence of relevant information that is not transmitted. They recognize that the moments of transition with the patient are fundamental. Most of the sample agrees with the use of a standardized document based on the ISBAR methodology, allowing the improvement of nursing care quality, being fundamental in-patient safety.

Regarding the sample's opinion on the topic of patient safety, the guidelines on effective communication in the transition of care are not known by all members, and there is a need for training in this area. The greater the professionals' knowledge on the topic, the greater their acceptance of change.

This study allowed for the analysis and clarification of phenomena sensitive to nursing care, enabling an understanding for the construction of knowledge of Nursing as a discipline, highlighting the importance of effective communication in the transition of care.

REFERENCES

1. Direção-Geral da Saúde. Norma 001/2017: comunicação eficaz na transição de cuidados de saúde. Lisboa: Direção-geral de Saúde. [Internet]. 2017 [accessed 20 mar 2019]. Available from: <https://www.dgs.pt/directrizes-da-dgs/normas-e-circulares-normativas/norma-n-0012017-de-08022017.aspx>.

2. Bergs J, Lambrechts F, Mulleneers I, Lenaerts K, Hauquier C, Proesmans G, et al. A tailored intervention to improving the quality of intrahospital nursing handover. *Int Emerg Nurs*. [Internet]. 2018 [accessed 12 mar 2019]; 36. Available from: <https://doi.org/10.1016/j.ienj.2017.07.005>.
3. Redley B, Botti M, Wood B, Bucknall T. Interprofessional communication supporting clinical handover in emergency departments: an observation study. *Australas Emerg Care*. [Internet]. 2017 [accessed 12 mar 2019]; 20(3). Available from: <https://doi.org/10.1016/j.aenj.2017.05.003>.
4. Clairol MG, Ordozgoiti AV, Lugo DO, Maspoch EC, Font MM, Oliva ME. Evaluación del traspaso de información (Hand Off) en equipos de enfermería de urgencias. *Rev Cubana Enferm* [Internet]. 2017 [accessed 22 mar 2019]; 33(3). Available from: <http://www.revenfermeria.sld.cu/index.php/enf/article/view/1539/292>.
5. Direção-Geral da Saúde & Associação Portuguesa para o Desenvolvimento Hospitalar. Relatório Segurança dos Pacientes: Avaliação da Cultura nos Hospitais. [Internet]. Lisboa: Direção-geral de Saúde; 2015 [accessed 12 mar 2019]. Available from: <https://www.dgs.pt/documentos-e-publicacoes/relatorio-seguranca-dos-doentes-avaliacao-da-cultura-nos-hospitais-pdf.aspx>.
6. Thomson H, Tourangeau A, Jeffs L, Puts M. Factors affecting quality of nurse shift handover in the emergency department. *J Adv Nurs*. [Internet]. 2018 [accessed 01 mar 2019]; 74(4). Available from: <https://doi.org/10.1111/jan.13499>.
7. Streiner DL. Being inconsistent about consistency: when coefficient alpha does and doesn't matter. *J Pers Assess* [Internet]. 2003 [accessed 02 fev 2019]; 80. Available from: https://doi.org/10.1207/S15327752JPA8003_01.
8. Pereira A. SPSS Guia prático de utilização: análise de dados para ciências sociais e psicologia. 7. ed.: Lisboa; 2006.
9. Benner P. De iniciado a perito. Coimbra: Quarteto; 2001.
10. Kerr D, Klim S, Kelly A-M, McCann T. Impact of a modified nursing handover model for improving nursing care and documentation in the emergency department: a pre-and post-implementation study. *Int J Nurs Pract*. [Internet]. 2016 [accessed 02 fev 2019]; 22(1). Available from: <http://dx.doi.org/10.1111/ijn.12365>.
11. Potts L, Ryan C, Diegel-Vacek L, Murchek A. Improving patient flow from the emergency department utilizing a standardized electronic nursing handoff process. *J Nurs Adm*. [Internet]. 2018 [accessed 02 fev 2019]; 48(9). Available from: <http://doi.org/10.1097/nna.0000000000000645>.
12. Campbell D, Dontje K. Implementing bedside handoff in the emergency department: a practice improvement Project. *J Emerg Nurs*. [internet] 2019 [accessed 20 mar de 2019];45(2):149-154. Available from: <http://doi.org/10.1016/j.jen.2018.09.007>.

*Article extracted from the master's thesis "Safety of the Critical Patient: Effective communication in the transition of care transition of care in the general emergency department". Instituto Politécnico de Setúbal, Escola Superior de Saúde, Setúbal, 2019.

Received: 02/07/2021

Approved: 03/10/2021

Associate editor: Luciana Puchalski Kalinke

Corresponding author:

Cidália Maria da Cruz Silva Patacas de Castro

Escola Superior de Saúde Egas Moniz - Almada, Portugal

E-mail: cmcastro@egasmoniz.edu.pt

Role of Authors:

Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - Castro CM da CSP de, Marques M do CMP, Vaz CR de OT; Drafting the work or revising it critically for important intellectual content - Castro CM da CSP de, Marques M do CMP, Vaz CR de OT. All authors approved the final version of the text.

ISSN 2176-9133



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).