

Competences of the emergency nurse and the product of nursing care: an integrative review

Competências do enfermeiro em emergência e o produto do cuidar em enfermagem: revisão integrativa

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ABSTRACT

Objective: identifying the competences of the emergency nurse and the product of nursing care. **Methods:** integrative review of 16 studies identified through an electronic search in the databases Literatura Latino-Americana e do Caribe em Ciências da Saúde, Sistema Online de Busca e Análise de Literatura Médica, Cumulative Index to Nursing and Allied Health Literature, and Scientific Eletronic Library Online, using the descriptors: Professional Competence, Emergency Nursing, Nursing Assessment, Process Assessment (Health Care), Nursing Service, Hospital, Nursing Care and Professional Practice. Results: 16 studies were included. 12 presented the minimum competences required from the emergency nurse and 4 referred to the product of nursing care. **Conclusion**: the most commonly present competences were "performance of the attention" and "leadership". The product of nursing care needs to be further explored, especially in emergencies.

Descriptors: Professional Competence; Nursing Care; Emergency Nursing; Professional Practice.

RESUMO

Objetivo: identificar as competências do enfermeiro em emergência e o produto do cuidar em enfermagem. Métodos: revisão integrativa com 16 estudos incluídos, identificados por meio de busca eletrônica na Literatura Latino--Americana e do Caribe em Ciências da Saúde, Sistema Online de Busca e Análise de Literatura Médica, Cumulative Index to Nursing and Allied Health Literature e Scientific Eletronic Library Online a partir de descritores: Professional Competence, Emergency Nursing, Nursing Assessment, Process Assessment (Health Care), Nursing Service, Hospital, Nursing Care e Professional Practice. Resultados: foram incluídos 16 estudos, dos quais 12 apresentaram as competências mínimas requeridas ao enfermeiro de emergência, e 4 se referiam ao produto do cuidar em enfermagem. Conclusão: as competências que mais emergiram foram "desempenho assistencial" e "liderança". O produto do cuidado em enfermagem precisa ser mais explorado, sobretudo nas

Descritores: Competência Profissional; Cuidados de Enfermagem; Enfermagem em Emergência; Prática Profissional.

Introduction

In emergency services, the nurses are involved in the management of healthcare in articulate managerial actions⁽¹⁾. The work of these professionals has been notable due to their advanced actions, be them a result of their knowledge or practices, or of the space they occupy in the production of care and in the organization of the service. This is due to the fact that nursing actions are interconnected, with a remarkable presence of technical and scientific knowledge⁽²⁾.

Nurses are responsible for the management of care. To propose new interventions, they must evaluate the product generated by the attention, which will reflect on the services offered⁽³⁾. That is because the main challenge is taking ownership of the science and complexity inherent to the product of care, integrating it in the traditional management model. This integration, in turn, will lead to a better understanding of the team, the environment, and the organizational behavior, to project innovation in the different ways to research and lead⁽⁴⁾.

The human capital and the support services, understood as structural factors, as well as the method of work organization based on the planning of assistance, attention to the patient/family, and interdisciplinary interaction, are structural factors that define the product of nursing care. This cohesion will lead to a better evaluation of the product⁽⁵⁾.

For the evaluation to be better, emergency nurses must have a set of competences that will lead them to develop their functions well. A recent study⁽⁶⁾ found said competences using a matrix, and the following stood out: healthcare performance, teamwork, leadership, humanization, interpersonal relations, decision making, goal-focused actions, and proactivity. Considering this result⁽⁶⁾, it becomes important to both identify the way in which these competences have been studied in emergency nurses and explore the available literature on the concept of the product of healthcare.

Therefore, this study aimed to identify the competences of emergency nurses and the product of nursing care.

Methods

This is an integrative literature review⁽⁷⁾, divided in the following stages: problem formulation, data collection, data evaluation, analysis and interpretation, presentation of results and conclusions⁽⁷⁻⁸⁾. The PICo strategy⁽⁹⁾ was also used, with: P: nurse; I: competences and the product of care; Co: the emergency service. Therefore, the research question was: "What are the competences of the emergency nurse and the product of nursing care?"

The bibliographic survey was carried out from July to September 2019, through an electronic search in the databases Literatura Latino-americana e do Caribe em Ciências da Saúde, Sistema Online de Busca e Análise de Literatura Médica, Cumulative Index to Nursing and Allied Health Literature, and Scientific Eletronic Library Online, using the descriptors: Professional Competence, Emergency Nursing, Nursing Assessment, Process Assessment (Health Care), Nursing Service, Hospital, Nursing Care and Professional Practice.

The intersection of the descriptors was surveyed using the Boolean operator "and" as a restrictive combining tool and the following strategies: 1) Professional Competence and Emergency Nursing; 2) Professional Competence and Nursing Assessment and Emergency Nursing; 3) Process Assessment (Health Care) and Nursing Service, Hospital and Nursing Care; and 4) Professional Competence and Professional Practice and Emergency Nursing.

Inclusion criteria were: original articles published from 2014 to 2019, fully available, in Portuguese, English or Spanish. The time frame was chosen considering the publication of the study about Competence Matrixes in Emergency Nursing⁽⁶⁾, from 2014, and the article on the concept of the product of care,

published in $2015^{(10)}$. Were excluded: theses, dissertations, reviews, editorials, and abstracts from congress annals.

Based on the combination of descriptors, 416 productions were located. Manual analyses of the publications were carried out considering the titles and abstracts; later, repeated articles were discarded – three, in this case. As a result, 397 articles were excluded for not being in accordance to the initially established research question. The final sample included 16 articles.

The selected articles were analyzed in full and classified in two groups: the product of nursing healthcare, and the competences of the emergency nurse. Data interpretation and analysis were carried out in an organized manner, listing the following items: name of the authors, journal, year, objectives, and main results.

The evidence level of the studies was classified according to the hierarchical criteria from the Agency for Healthcare Research and Quality (AHRQ), an insti-

-tution from the United States which classifies evidence levels in six levels: level 1 is attributed to meta-analyses of multiple controlled studies; level 2, to individual experimental design studies; level 3, to quasi-experimental or control-case studies; level 4, to non-experimental studies; level 5, to verifiable case reports or program evaluations; and level 6, to the opinions of authorities, specialist committees, and non-research-based information interpretation⁽¹¹⁾.

The professional competences highlighted in the matrix for emergency nurses⁽⁶⁾ were identified in the articles in a descriptive or implicit way, according to the aforementioned definitions.

The process of article selection is described below, in a flowchart of the selection and identification of studies according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRIS-MA)¹²⁾ (Figure 1).

Two researchers, experienced on the theme, participated in the stages described by the PRISMA. There were no disagreements between them.

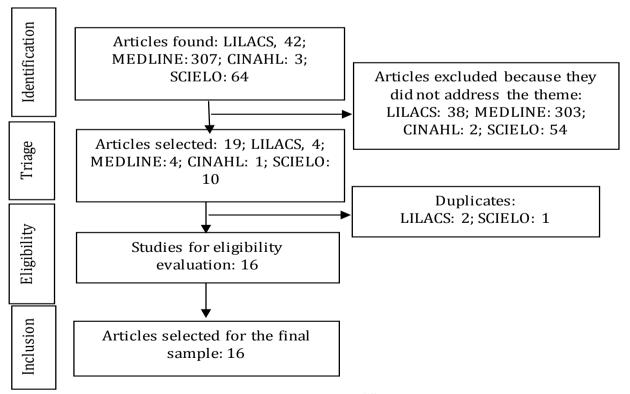


Figure 1 - Flowchart of the selection of publications - PRISMA⁽¹²⁾. São Paulo, SP, Brazil, 2019

Results

From the 16 articles included in this review, 4 studies $^{(10,13-15)}$ addressed the product of nursing care and $12^{(16-27)}$ presented the minimum competences required from emergency nurses.

The articles that addressed the product of nursing care were developed and published in Brazil, from 2015 to 2018^(10,13-15). Their population included clinical nurses. Only four articles from the perspective of the theme were found. Three of them addressed the creation and validation of the construct; the fourth discussed its applicability in previously selected hospitals. Figure 2 describes the objectives of these articles, as well as their main results and evidence levels.

Twelve studies presented the competences required from emergency nurses, according to the matrix published in $2015^{(27)}$. The performance of the

assistance was identified in 4 (33.3%), and leadership in 5 (41.7%) studies. The preoccupation of the studies in mapping these competences as necessary for the work of the nurse stands out. These results are presented in Figure 3.

The studies shown in Figure 3 showed the competences highlighted in the matrix of competences⁽⁶⁾, demonstrating its authenticity and applicability in emergencies, which will make it possible to develop the professional profile of the nurses.

The evidence level of the 16 articles selected showed its relevance, since they were in accordance to the proposals established in this review through the use of the AHRQ⁽¹¹⁾, reaching levels from 4 to 5. It is necessary to further produce studies whose methodological designs are capable of producing more robust evidence levels, and thus capable of serving as support for the management practices of the nurse.

| Author/Journal/ Year | Objectives | Main results | Nível de evidência |
|---|---|--|-----------------------|
| Cucolo DF, Perroca MG ⁽¹⁰⁾ /Acta Paul Enferm/2015 | Identifying the main factors involved in the production of nursing care for the generation of instrument items. | Thematic categories: planning; intervention and evaluation of care; nursing team sizing and qualification; necessary resources for assistance; interdisciplinary interaction. | 4 |
| Cucolo DF, Perroca MG ⁽¹³⁾ /Rev Latino- Am Enfermagem/2015 | Developing and validating the contents of an instrument on the production of nursing care | Stage 1: generating items and developing the instrument; Stage 2: prototype test; Stage 3: content validation | 4 |
| Cucolo DF, Perroca MG ⁽¹⁴⁾ /Rev Latino-Am Enfermagem/2017 | Verifying the reliability estimates and the validity of the constructs in the scale Evaluation of the Product of Nursing Care (APROCENF), as well as its applicability. | 172 evaluations were carried out in medical and surgical hospitalization units, as well as in pediatric units, mother-child units, general intensive care units, coronary intensive care units, and pediatric intensive care units; Classification of the nursing healthcare product: bad (3; 1.8%), regular (38; 22.1%), good (111; 64.5%); great (20; 11.6%) | 4 |
| Chotolli MR, et al ⁽¹⁵⁾ /Rev Bras Enferm/2018 | items that contributed the most to the score; comparing the product of care among | In the hospitals evaluated, the product delivered by nursing was found to be "good" and it became clear that the APROCENF is an important tool that gives support to the decision making of nurses and to the management of care. | 4 |

Figure 2 – Summary of the characteristics of studies on the product of nursing healthcare. São Paulo, SP, Brazil, 2019

| Author/Journal/Year | Objectives | Competences identified | Evidence levels |
|--|---|--|--------------------|
| Rawson H, et al ⁽¹⁶⁾ /J Australas Emerg Nurs J/2017 | Knowledge of nurses and of healthcare regarding elder patients in emergency | Performance in assistance, humanization | 5 |
| Martínez-Segura E, et al ⁽¹⁷⁾ / Emergencias/2017 | Identifying the sociodemographic profile and the levels of competences of nurses in emergencies | Decision making, proactivity | 4 |
| Jenkins J ⁽¹⁸⁾ /Emerg Nurse/2016 | Identifying clinical abilities in evidence-based practices in emergencies | Teamwork, goal-focused actions | 5 |
| Burchill CN, Polomano R ⁽¹⁹⁾ /Int Emerg Nurs/2016 | Understanding the relation between attitudes and demographic factors in nurses and evidence-based practices | Proactivity, goal-focused actions | 5 |
| Cabilan CJ, et al ⁽²⁰⁾ /J Adv Nurs/2016 | Evaluating the knowledge of the nurses on the use of medications in emergencies | Decision making, goal-focused actions | 4 |
| Mello JJ, et al ⁽²¹⁾ /Int Emerg Nurs/2016 | Evaluating the competence of nurses in psychiatric emergencies | Performance in the assistance | 5 |
| Thomas D, et al ⁽²²⁾ /J Emerg Nurs/2015 | Describing the pain-management protocols used in triage | Performance in the assistance, leadership | 5 |
| Ucuzal M, Doğan R ⁽²³⁾ /Int Emerg Nurs/2015 | Examining the knowledge, attitudes, and abilities of emergency nurses in pain | Humanization, leadership | 5 |
| Pretorius A, et al ⁽²⁴⁾ /Pain Manag Nurs/2015 | Identifying hindrances and enabling factors in nursing with regards to the treatment of pain | Proactivity, Performance in the assistance, leadership | 4 |
| Cork LL ⁽²⁵⁾ /J Trauma Nurs/2014 | Exploring the intuition of nurses with regards to the severity of traumas in emergencies | Leadership, teamwork | 5 |
| Fitzpatrick JJ, et al ⁽²⁶⁾ /J Emerg Nurs/2014 | Perceptions about the empowering of nurses and their intentions of abandoning the profession | Leadership, interpersonal relation | 5 |
| Holanda FL, et al ⁽²⁷⁾ /Acta Paul Enferm/2015 | Proposing the profile of professional competence of the emergency nurse | All eight competences mentioned above | 5 |

Figure 3 – Summary of the characteristics of studies on the competences of the emergency nurse. São Paulo, SP, Brazil, 2019

Discussion

The limitation of this study is the possibility that some researches may not have been identified within the period of the research. However, the research furthers the knowledge on the field as it finds the gaps in literature that need to be filled, including the development of the competences of emergency nurses and the relation of these competences to the product of nursing care.

The actions of the nurse in emergency units entail the development and the applicability of the competences required for activities in this complex and unique space, where the professional is required to think fast and make good decisions based on previous knowledge. The competences required for the profi

-le of this emergency professional⁽²⁷⁾ are notorious in studies that, despite being incipient, aim to contribute and, simultaneously, create a theoretical-practical framework of the competences required from the professionals who work in this environment.

The competences that were most mentioned in the articles selected were "performance of the assistance" and "leadership". 70% of these articles^(17,20-21,23-27) only diagnosed the competences mentioned. However, it stands out that these need to be developed in emergency nurses, in a way that they can guide the conduct of these professionals and increasingly capacitate them to offer critical and evidence-based care that can result in a high-standard nursing

healthcare product.

The articles that highlighted the competence "performance of the assistance" (17,22-23,25,27) found that the actions of the nurses were based on scientific knowledge, due to the carefulness of the attention they offered in the service. They pointed out the common goal with regards to the satisfaction of the patient and directed their actions to results that could lead to high-quality service. It should be highlighted that this competence is defined as the offering of care based on scientific knowledge. The nurse must offer an assistance that is personal and unique to the demands and expectations of the client, to generate a quality result (6).

Another competence found in this review was leadership⁽⁶⁾, whose definition is the use of strategies that aim to reach a goal using influences that lead to the exercise of daily activities. The studies that highlighted leadership as a competence^(23-24,26-27) emphasized the capacity nursing professionals have to lead emergency units, often being in the front line of the nursing team, the interdisciplinary team, and the management of care.

The leadership of the nurse in the emergency units is important for the implementation and development of actions that make patient care services viable. These professionals must have in their plans the conditions for the prediction and provision of activities and base their actions on a leadership that can articulate individual characteristics and the needs of the organization^(25,27).

The emergency hospital service needs a dynamic and resolutive team, capable of acting in synchrony in many situations, in a way that reflects in the recovery and satisfaction of the patients⁽²⁷⁾. Therefore, the management of the nurse is essential and predominant, since they are the responsible for executing activities of care and for managing the resources needed, offering a quality service to the users⁽²⁴⁾.

Regarding the product of nursing healthcare, it is a process that can be influenced by different types of knowledge. This specific knowledge regarding care

and healthcare guarantees that the nurse has professional autonomy, meaning that heir competences reflect on the decisions made^(18,27).

In its professional evolution, nursing went through many stages with regards to healthcare with human beings. That enabled the discipline to build a specific body of knowledge, becoming a science of its own⁽²⁰⁾. A healthcare that is focused on the real needs of the patient is seen as an important attribute to obtain better assistance and managerial results. This model of understanding healthcare is identified as an essential competence of nurses^(21,27). This will set the bounds for a (re)structuring of processes and a work environment that favors the development of said behavior. Therefore, it is impossible to dissociate care and the process that produced it⁽¹⁴⁾.

In this context, the product of healthcare, evaluated from the instrument Evaluation of the Product of Nursing Care⁽¹⁴⁾, will enable nurses to have a better dynamic of care, management, and to better deal with assistance and managerial issues. Therefore, its applicability, together with the competences required from the emergency nurses, will guide the assistance offered to the patients in the attention to their demands.

As a result, the ways in which instrument Evaluation of the Product of Nursing Care⁽¹⁴⁾ improves on the concept of the product of care in nursing stands out, especially considering that it is yet to be tested in emergency units. This scale is made up of eight items: nursing assistance planning; necessary resources to offer assistance; nursing personnel sizing; actions of personnel education and improvement; healthcare follow-up or transference; interdisciplinary interaction and actions; attention to the patient and/or relative; and attention to assistance needs⁽¹⁴⁾.

The competences found in the articles of this review need to be developed in emergency nurses, so they can guide their conducts and become increasingly able to offer healthcare in a critical and evidence-based manner, leading to an increasingly qualified nursing healthcare product.

Conclusion

The competences that emerged the most were performance of the assistance and leadership. Production on the products of nursing healthcare refer to the creation and validation of a measuring instrument, but there are still no results about the applicability of this concept in the context of emergency. Future studies on this subject should direct emergency nurses to improve their actions from the perspective of the product of healthcare in nursing.

Collaborations

Jesus JA and Balsanelli AP contributed for the conception and for the project, data analysis and interpretation, article writing, in the relevant critical review of the intellectual content and the final approval of the version to be published.

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