

RESEARCH PAPER (ORIGINAL)

Stress in an emergency room and the challenges for Brazilian and Portuguese nurses

Stresse em serviço de urgência e os desafios para enfermeiros brasileiros e portugueses
Estrés en el servicio de urgencias y desafíos para enfermeros brasileños y portugueses

Joana D'Arc de Souza*; João Mário Pessoa Júnior **; Francisco Arnoldo Nunes de Miranda***

Abstract

Background: Stress in the emergency room is a major public health issue, with a negative impact on the professionals' lives.

Objectives: To analyze Brazilian and Portuguese nurses' opinion about the presence of stress in an emergency room.

Methodology: Descriptive and qualitative study conducted with 120 professionals in a public healthcare institution in Brazil and in another one in Portugal. Data were collected through semi-structured interviews, processed using the Alceste software, version 4.7, and interpreted using thematic content analysis.

Results: Two thematic blocks emerged: the work in the emergency room and its association with stress, and the emergency room: scenarios and challenges.

Conclusion: Nurses experience stress in an emergency room as a result of feelings of dissatisfaction and difficulties in meeting patient needs while preserving human dignity.

Keywords: burnout, professional; nursing; emergencies; occupational health

Resumo

Enquadramento: O stresse em serviço de urgência configura-se como um dos principais problemas de saúde pública, repercutindo-se de forma negativa na vida dos trabalhadores.

Objetivos: Analisar a opinião de enfermeiros brasileiros e portugueses sobre o stresse em serviço de urgência.

Metodologia: Estudo descritivo de abordagem qualitativa, realizado com 120 enfermeiros em 2 serviços públicos de saúde, um no Brasil e outro em Portugal. Os dados foram colhidos através de entrevistas semiestruturadas, processados pelo *software* Alceste versão 4.7 e interpretados com análise temática de conteúdo.

Resultados: Elaboraram-se 2 blocos temáticos: o trabalho no setor de urgência e a sua interface com o stresse, e o setor de urgência: cenários e desafios.

Conclusão: Os enfermeiros compreendem o stresse em serviço de urgência com sentimentos de insatisfação, configurando um trabalho constituído de dificuldades, perpassado pela impossibilidade de atender às necessidades dos usuários segundo os padrões da dignidade humana.

Palavras-chave: esgotamento profissional; enfermagem; emergências; saúde do trabalhador

*Ph.D., Health Sciences. Full Professor, Faculdade Natalense de Ensino e Cultura, Paulista University, 59063-200, Natal, Brazil [darc:joan@gmail.com]. Contribution to the article: literature search, data collection and analysis, discussion and article writing. Address for correspondence: Rua José Seabra, nº 4, Village dos Mares, Capim Macio, 59-75510, Natal, Brazil
** Ph.D., Nursing, Professor, Federal University of Rio de Janeiro, 27930-560, Rio de Janeiro, Brazil [joaoariopessoa@gmail.com]. Contribution to the article: literature search, data analysis, discussion and article writing.

*** Ph.D., Nursing, Professor, Nursing Department, Federal University of Rio Grande do Norte, 59072-970, Natal, Brazil [farnoldo@gmail.com]. Contribution to the article: discussion and article writing.

Resumen

Marco contextual: El estrés en el servicio de urgencias supone uno de los principales problemas de la salud pública y repercute de forma negativa en la vida de los trabajadores.

Objetivos: Analizar la opinión de los enfermeros brasileños y portugueses sobre el estrés en el servicio de urgencias.

Metodología: Estudio descriptivo de enfoque cualitativo realizado con 120 enfermeros en 2 servicios públicos sanitarios, uno en Brasil y otro en Portugal. Los datos se recogieron a través de entrevistas semiestructuradas, se procesaron con el *software* Alceste versión 4.7 y se interpretaron con el análisis temático de contenido.

Resultados: Se elaboraron 2 bloques temáticos: el trabajo en el sector de urgencias y su interfaz con el estrés, y el sector de urgencias, escenarios y desafíos.

Conclusión: Los enfermeros comprenden el estrés en el servicio de urgencias con sentimientos de insatisfacción, lo que hace que el trabajo lo constituyan dificultades, como la imposibilidad de atender a las necesidades de los usuarios de acuerdo con los patrones de la dignidad humana.

Palabras clave: agotamiento profesional; enfermería; urgencias médicas; salud laboral

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Introduction

Social inequalities between countries and the development of public healthcare policies, from the perspective of human rights and universal coverage, are reflected in the process of training healthcare professionals and require the redesign of nurses' work space, particularly in emergency rooms, where stress is experienced (Craveiro, Hortale, Oliveira, & Dus-sault, 2015; Papathanassoglou et al., 2012).

Stress is popularly known as the *evil of the century* and, due to its reach, it occupies a prominent place in the media, being considered as a public health issue with negative repercussions in the professionals' lives (Oliveira, Pessoa Júnior, Miranda, Cavalcante, & Almeida, 2014).

The emergency room, which is the focus of this study, is a potentially stressful work environment because it leads to the physical and/or mental burnout of its workers, with deleterious effects on health (Gomes, Santos, & Carolino, 2013). In this environment, care is not easily provided and it is not devoid of personal and professional distress.

Almost all mental burden and cognitive demands are placed on nurses (Martins et al., 2013). Therefore, the issue of stress in emergency rooms must be analyzed together with its originating features.

Internal causes take into account the subjectivity and the peculiarities inherent to each individual's personality and specific characteristics, as well as the intensity and unpredictability of the stressful situation (Sadock & Sadock, 2011).

Nurses perceive stress in the emergency room as harmful, resulting from work overload in the search for answers to the demands in these services (Oliveira, Alchieri, Pessoa Júnior, Miranda, & Almeida, 2013).

In this context, this study becomes even more relevant because of the negative impact of stress on the health of nurses in emergency services. The results can contribute to the debate on the scenarios and challenges faced by nurses in emergency services, taking into consideration the healthcare-related cultural and political similarities and differences between Brazil and Portugal. In addition, they may also encourage the formulation of education strate-

gies and professional updates in this field.

Thus, the objective of this study was to analyze the opinion of Brazilian and Portuguese nurses about stress in the emergency room.

Background

The first studies in history about healthcare-related stress were conducted by Hans Selye (Selye, 2005), a Canadian researcher. In 1936, in experiments with animal subjects, Selye identified a specific pattern on the animals' behavioral and physical responses. He systematized the theory of stress, with the formulation of the concept of General Adaptation Syndrome (GAS).

The GAS involved three stages: (i) the stage of alarm reaction, in which occurs the sympathetic activation and the activation of the adrenal medulla; (ii) the stage of resistance, in which occurs the activation of the adrenal cortex; and (iii) the stage of exhaustion, with terminal reactivation of the autonomic nervous system and the adrenal medulla (Selye, 2005).

It is important to distinguish between internal and external causes, since the external conditions (political-economic and social changes, accidents, changes at work, among others) that affect the body are often independent of the individual's inner world or will (Lipp, 2014; Selye, 2005).

Stress is considered as a complex, multicausal phenomenon; it reflects the nature of a fact or even an individual's ability to use resources to adapt to a situation and/or condition, in the attempt to overcome an internal and external threat (Sadock & Sadock, 2011).

In addition, the biological nature of stress is expressed in the psychosocial dimensions, while also being associated with the different social interactions, producing meanings, especially at work.

Some studies on stress allow contextualizing this syndrome experienced by healthcare professionals, namely nurses. In the emergency room, nurses' professional stress is partly a reflection of the shortage of human resources and inadequate staffing (aspects related to inadequate infrastructures, lack of material resources, high user demands, and conflicting interpersonal and professional relationships,

among others). Professionals' perception of work contributes to their protection against distress and occupational stress (Assis, Caraúna, & Karine, 2015; Bezerra, Silva, & Ramos, 2012).

Research question

This study aimed to answer the following question: How do Brazilian and Portuguese nurses identify stress in an emergency room?

Methodology

A descriptive, qualitative study was carried out in two public healthcare services: one in Brazil and another one in Portugal. In Brazil (BR), the study was conducted at an emergency hospital located in the city of Natal, Rio Grande do Norte, between September 2013 and February 2014. In Portugal (PT), the study took place in an emergency room from a public hospital in the district of Aveiro, central region of Portugal, between March and August 2014.

The study included 120 nurses: 60 Brazilian nurses and 60 Portuguese nurses. The inclusion criteria for participants of both institutions were as follows: belonging to the permanent nursing staff of each hospital under analysis; working in the emergency room for at least 1 year; and accepting to participate in the study.

Data were collected through semi-structured interviews. We used a script composed of two items: the participants' sociodemographic and occupational characteristics, and issues related to work, stress, and service organization. The interviews allowed exploring the contents and information on the nurses' social representations of stress in emergency services.

Data processing allowed comparing the elements of the corpus and the interviews, words or sentences, and organizing them into themes and categories, which were analyzed using the Alceste software, version 4.7 (IMAGE, Toulouse, France). Content analysis was performed by this software through quantitative techniques of textual data treat-

ment, that is, the topical organization of an answer was calculated, rather than its meaning, so as to highlight the lexical possibilities based on words (a trait, a reference, or just an intended meaning; Azevedo, Costa, & Miranda, 2013).

The inductive term used to create the corpus in both countries (separately and jointly) was *stress*. The results were categorically presented. In line with the results obtained from data processing, Bardin's content analysis (2009) was used. Meaning was obtained in the comparative content analysis and based on the interpretation and expertise of Silva and Fossá (2015). Content analysis can be defined as a set of techniques for communication analysis (Bardin, 2009) that are divided into three phases: 1) pre-analysis, 2) exploration of the material, and 3) treatment, inference, and interpretation of results.

It should be emphasized that the participants' sociodemographic characteristics are descriptively presented through simple statistics.

The research complied with the ethical and legal requirements for research with human beings, in accordance with Resolution 466/12 of the National Health Council. In Brazil, the study design was approved by the Research Ethics Committee of the Hospital Onofre Lopes, under register CEP-UFRN 114. In Portugal, the study design was approved by the Ethics Committee of the University of Aveiro under no. 022784, after deliberation of both hospitals' Board of Directors. The participants formalized their acceptance by signing the Informed Consent Form.

Results

The participants' age ranged between 33 and 58 years (BR = 33 to 58, and PT = 28 to 42). The mean age was 40 years in Brazil and 37 years in Portugal. Nurses took between 2 to 28 years to complete their degree (BR = 6 to 28, and PT = 2 to 14), and their professional experience in an emergency room ranged from 2 to 27 years (BR = 5 to 27, and PT = 2 to 12). Three versions were distributed and analyzed: two were analyzed separately, i.e., one for each country and another one was jointly analyzed. The Alceste software was run using the data

from each country so as to first compare results separately, and then combine the data while respecting the emergence.

The Alceste report divided the corpus into Elementary Context Units (ECUs): 419 ECUs in the BR group, and 457 ECUs in the PT group. Of these, 91% and 88% of the corresponding corpus were considered relevant and analyzed by the software, which resulted in the distribution of the textual data into four classes based on 481 ECUs or 79%, thus ensuring a satisfactory use of the corpus. Following Bardin's steps (2009), the results from both countries are presented separately for a better visualization, since their accuracy, validity, and reliability had already been tested.

The interviews with Brazilian and Portuguese nurses, composed of ECUs, which were processed using Alceste and subjected to themat-

ic content analysis, produced two thematic blocks and corresponding themes. It should be noted that the procedures were performed based on a single database of textual data, which is in line with similar studies (Santos & Miranda, 2014). The research participants are identified by the ECUs of each of the countries participating in the study.

The first thematic block entitled The work in the emergency room and its association with stress was composed of the following themes: 1.1) Working conditions as a cause of stress; and 1.2) Nurses' professional autonomy. The second thematic block entitled The emergency room: scenarios and challenges comprised the following themes: 2.1) Team/user interpersonal relationships and humanization; and 2.2) Public policies in emergency: a field under construction.

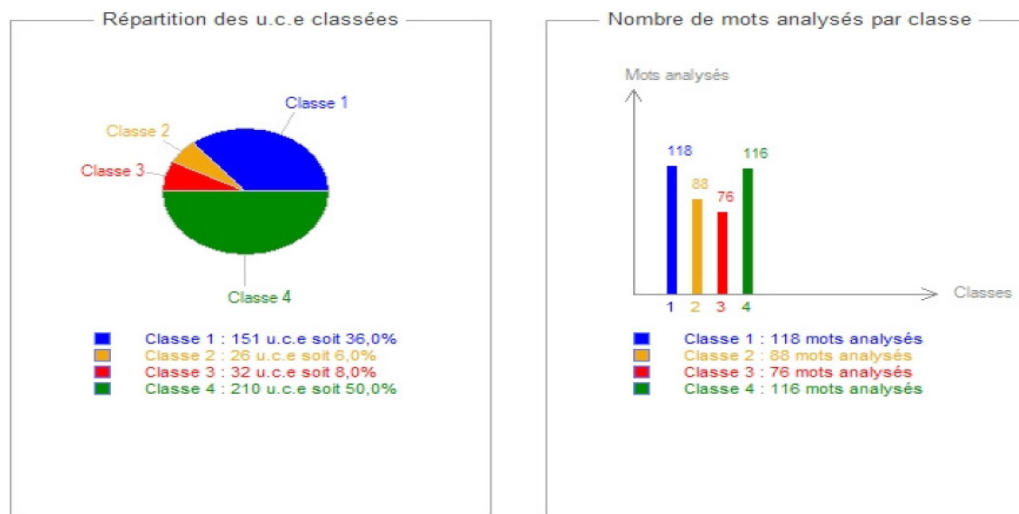


Figure 1. Distribution of the elementary context units and analyzed words that compose the classes produced by the Alceste.

Thematic block 1 - The work in the emergency room and its association with stress

Theme 1.1 - Working conditions as a cause of stress

The result of this class pointed to 151 ECUs (36.0 %) in the BR group and 193 ECUs (42.23%) in the PT group. Figure 1 on the data reported by Portuguese and Brazilian nurses shows the formation of classes 2 and 3 in association with class 1. The interviewees considered the emergency room to be challenging for everyone involved in this work

process. Nurses also mentioned the difficulties related to human resources and physical infrastructures, which they consider to be associated with the inadequate delivery of primary healthcare to the typical population, as can be seen in the following ECUs:

Here, in the hospital, the beds are always occupied. With the increasing demand, patients are left in the corridors, waiting for a bed or to be transferred to other hospitals. As if that were not enough, we work in a

scenario where physical infrastructures are inadequate, and where there is a shortage of materials, equipment, and medicines. The Emergency Care Units [Unidades de Pronto Atendimento] operate 24/7, and their goal was to work in collaboration with the other Healthcare Network services, which is not the case. (Nurse, BR, November, 2013)

We deal with too many patients, long waiting times, overcrowding, inadequate staffing, and insufficient physical space, causing stress in both professionals and users. The organization of hospital admission must be discussed, because patients need their needs to be addressed in the emergency services. (Nurse, PT, April, 2014)

Theme 1.2 - Nurses' professional autonomy

This theme was substantiated by the content analysis and classes 2 and 3, which were structured with 26 ECUs (6.0%) from the BR group and 32 ECUs (8.0%) from the PT group, respectively. It should also be emphasized that the class 2 of both groups (BR and PT) showed a lower explanatory power in Dendrograms 1 and 2. The interviewees associate the lack of autonomy with the hierarchization and organization of the teams with the physician at the center of the work process, at the expense of other professionals. The semantic contents of this class are exemplified below:

There is no team spirit here, decisions are taken in isolation or according to the physician. This reality favors selfishness, and promotes stress, in addition to reflecting an individualistic vision, hindering care delivery. There is a need to demystify the physician's role and broaden the focus of the nurse's intervention in the emergency services, which can be done through interdisciplinarity. To do this, it is necessary to integrate various specialties with a sense of complementarity. (Nurse, BR, December, 2013)

My job at the emergency service is to admit the patient, administer the

prescribed medication, check vital signs when necessary, collect blood, I rarely put on a dressing, I help the physician if necessary. For me, interdisciplinarity here is a discursive rhetoric which is somewhat strengthening the autonomy of some at the detriment of others. Complex care delivery sometimes requires various areas of knowledge and interventions, they all need space and collaboration. (Nurse, PT, April, 2014)

Thematic block 2 - The emergency room: scenarios and challenges

Theme 2.1 - Team/user interpersonal relationships and humanization

This theme emerged from 32 ECUs (8.0%) in the BR group and 236 ECUs (51.64%) in the PT group. The contents of this class point to the relationship between teams, which is a necessary condition for the exercise of humanization:

Care demands and the long waiting lines compromise the process of humanization and the relationship between teams and users. We are often faced with situations in which we need to triage patients waiting to be treated, that is, choose the most severely ill patients. At that point, I feel that I am being unhuman. (Nurse, BR, December, 13)

The excessive number of users at emergency admission poses a series of issues:

How can I perform humanized practices and have a healthy relationship in an environment that lacks the space to accommodate patients and human resources, with work overload, and a disorganized working process. The excessive noise of emergency vehicles is an example of situations that become a source of stress, and that can be considered as a phenomenon that changes humanization processes and relationships. (Nurse, PT, May, 2014)

Theme 2.2 - Public policies in emergency: a field under construction

This theme was compared and interpreted

based on class 4 and involved most of the ECUs classified in this corpus (210 or 50%), as shown below:

Hospitals are the point of entry to the healthcare system. This is the Brazilian reality. For the majority of the population, there is no other option but to use these services. The issue is that high-complexity emergency rooms are always crowded and facing an increasing number of patients. Emergency rooms need to be organized based on the assumptions of the National Policy for Emergency that advocates the access and admission to healthcare services according to their technological complexity. (Nurse, BR, January, 2013)

“In Portugal, the nursing work process is carried out only by nurses, and that involves the intellectual activities of service management and the performance of procedures with various levels of complexity (Nurse, PT, May, 2014)”.

“Public policies are still being developed and professionals working in emergency services still face many challenges, especially when designing the implementation of healthcare networks (Nurse, BR, January, 2013)”.

Discussion

The lexical contents mentioned by the interviewees reflected the difficulties encountered in their performance in emergency services. The results show no major difference in work methodologies between Brazil and Portugal, despite of the different scenarios of care delivery and the direct impact of the different social, political, and economic aspects.

The thematic block 1 The work in the emergency room and its association with stress described issues that generate stress-related concerns among Brazilian and Portuguese nurses. Interfaces were created between aspects related to human activity and the stress caused by multiple factors existing in the work environment. The importance of this class, for both groups, is reinforced by the significance of the following words: overload, professional, work, stress, excessive, care, de-

mand, shortage, scenario, lack, and burnout. There is a predominance of contents related to work overload, which represents a significant source of stress.

A study conducted with nurses in the emergency room of a medium-sized hospital in the interior region of Rio Grande do Norte identified the activity of nursing care delivery to patients as being the most stressful activity, having obtained the mean score for stress found among the nurses (Freitas et al., 2015). Occupational stress and coping in hospital practice require the encouragement of the nurse's role and autonomy with a view to proposing effective improvements in the occupational stress-generating environment. This requires a reflection so as to promote healthcare and improve quality in job performance (Teixeira, Reisdorfer, & Gherardi-Donat, 2014).

The difficulty is also reinforced in the theme (nurses' professional autonomy) with the following words: autonomy, institutions, hegemony, organization, interdisciplinarity, individualistic, detriment, emergency, integration. Words are most representative nasverbalizações of nurses words more representative of nasverbalizações nurses words more representative of nasverbalizações suffers question of autonomy of nurses has caused some discussions and challenges to its applicability in most hospitals, as well as other health services (Menezes, Tome, & Pereira, 2011). The topic of nurses' autonomy has triggered debates and raised challenges to its applicability in most hospital institutions, as well as in other healthcare services (Menezes, Priel, & Pereira, 2011).

Historically, nurses have always faced dilemmas, difficulties, and challenges for their affirmation in the healthcare area, both in the definition of their goals and in their relationship and interaction with the healthcare team and society in general (Almeida, Segui, Mafum, Labronice, & Peres, 2011). Despite this, and although nurses are the largest professional group in the healthcare sector, there is still a significant number of professionals who do not seek to show their importance in care delivery. Their daily life comes down to the accumulation of a variety of roles, a diversity of tasks and multipurpose activities (Gomes

et al., 2013). This reality has led to much ambiguity, tension, frustration, and stress, which are particularly reflected in the construction of nurses' identity and autonomy (Menezes et al., 2011).

Nurses in the emergency room feel belittled because they often do not participate in the decision-making process at their unit, they are overloaded with work due to the accumulation of tasks, leading to a physical and emotional burnout caused by operational conflicts, performance of activities with few physical resources and inadequate staffing, in addition to misadjusted wages (Teixeira et al., 2014). In Brazil, studies have been conducted with the main purpose of developing a process that enables to identify, promote, and manage the body of knowledge that workers must mobilize in order to promote quality in healthcare practice. From this perspective, they perceive interdisciplinarity as a privileged area for building specific knowledge/interventions, by reinforcing the necessary connection between the various areas as a way of substantiating and improving the treatments in force (Almeida et al., 2011).

In thematic block 2 The emergency room: scenarios and challenges, the most common words were humanization, search, care, stress, demand, situation, do, relationship, waiting lines, process, triage, teams. These words were identified in the analysis to this thematic axis, and are illustrated below in the semantic contents of this class. The literature highlights several stress-related factors in productive processes, namely difficulties in the relationship with immediate superiors, and in the interpersonal relationship with patients, relatives, colleagues, and other professionals; lack of support; and apathetic and dissatisfied nursing team (Bezerra et al., 2012). In addition, they also have to cope with death and the dying process, with patients in pain, terminally-ill patients, the emotional needs of patients and their families, aggressive patients and families, and the uncertainty regarding patient treatment (Oliveira et al., 2014).

Healthcare humanization cannot be understood alone, it entails communication, within a web of social relationships, and is associated with skills and attitudes to deal with specific situations in clinical practice. The function-

al dynamics of an emergency room, together with the severity of the patients' condition, and the constant unpredictability of events, make it an environment permeated by instability. Here, it is essential to provide quality nursing care based on a humanistic perspective, particularly in relation to the nursing work in emergency services (Almeida et al., 2011).

In theme 2.1, most of the contents in this class referred to situations inherent to emergency care policies, as illustrated by the words hospitals, emergency, policies, complexity, alternative, access.

The networks of urgent and emergency care in Brazil (*Sistema Único de Saúde*) and Portugal (*Sistema Nacional de Saúde*) are high-complexity networks, which, based on the recommendations of their healthcare systems, have adopted the Manchester Triage system. Based on patients' complaints, signs, and symptoms, they are classified according to clinical priorities (immediate, very urgent, urgent, standard, non-urgent) through colors (red, orange, yellow, green, blue) that can be visible in bracelets or cards, depending on the resources and logistics of each service. These colors also indicate the waiting time (immediate, up to 10 minutes, up to 1 hour, up to 2 hours, up to 4 hours). Therefore, services are organized based on admission and risk classification, according to the levels of complexity (Craveiro et al., 2015).

Emergency Care Units work 24/7 and their purposes include supporting primary healthcare units, reducing the overload of high-complexity hospitals, and stabilizing critically-ill patients to pre-hospital mobile care units. However, medium- and high-complexity hospitals became the point of entry to the healthcare system.

The observation rooms used to temporarily accommodate patients became admission areas, without the proper conditions in terms of infrastructure and staff for continuous care, often exposing patients to several risks. Therefore, measures should be taken to minimize stress levels and factors, thus improving nurses' quality of life of and their performance in healthcare delivery (Martins et al., 2013).

Emergency care still focuses on the hospital model, and, in most cases, hospitals contin-

ue to provide care to patients who do not necessarily need urgent care. In this way, the majority of the population uses these services because it is the fastest alternative to receive professional assistance, make appointments, and make laboratory, imaging, and diagnostic exams, which can be done on the same day without waiting for a long time (Santos & Miranda, 2014).

We recognize the limitations of this multicentric study regarding the specific cultural and linguistic aspects of each country. The results point to a problem related to the professionals' health, particularly nurses in the emergency room. In addition, the methodological nature of the study does not allow us to make generalizations on the phenomenon under analysis. Further studies should be conducted, given the relevance and importance of the topic worldwide.

Conclusion

The analysis of the opinion of Brazilian and Portuguese nurses about stress in the emergency room allowed us to objectively identify the working conditions and their association with stress, as well as the interpersonal relationships and the humanization process given the unpredictability of events involving patients, relatives, colleagues, and other professionals. The emergency room is, therefore, an asymmetric, complex, and challenging scenario for nurses. There are still other obstacles related to overload, professional, work, stress, excessive, care, demand, shortage, scenario, lack, and burnout that directly influence care delivery settings with a view to proposing a resolution for the situations.

In addition to the critical ability to prioritize nursing responses and sometimes nursing diagnoses for complaints (signs and symptoms of patients and relatives), nurses from both countries are required to have the necessary technical and theoretical knowledge to establish an individualized care plan, taking into account the established set of norms and routines to organize their daily work in the emergency services.

In addition, greater reflection and debate is needed on interpersonal relationships and

interdisciplinarity among the nursing team, given that they influence productivity and generate knowledge accessible to the groups, thus offering answers to complex and multifaceted situations that cause stress in the workplace.

References

- Almeida, M. L., Segui, M. L., Maftum, M. A., Labronice, L. M., & Peres, A. M. (2011). Instrumentos gerenciais utilizados na tomada de decisão do enfermeiro no contexto hospitalar. *Texto Contexto Enfermagem*, 20(esp.), 131-137. doi:10.1590/S0104-07072011000500017
- Assis, M. R., Caraúna, H., & Karine, D. (2015). Análise do estresse ocupacional em profissionais da saúde. *Conexões PSI*, 3(1), 62-71.
- Azevedo, D. M., Costa, R. K., & Miranda, F. A. (2013). Uso do Alceste na análise de dados qualitativos: Contribuições na pesquisa em enfermagem. *Revista de Enfermagem UFPE On Line*, 7(esp.), 5015-5022. doi:10.5205/reuol.4700-39563-1-E-D.0707esp201326
- Bardin, L. (2009). *Análise de conteúdo*. Lisboa, Portugal: Edições 70.
- Bezerra, F. N., Silva, T. M., & Ramos, V. P. (2012). Estresse ocupacional dos enfermeiros de urgência e emergência: Revisão integrativa da literatura. *Acta Paulista de Enfermagem*, 25(2 esp.), 151-156. doi:10.1590/S0103-21002012000900024
- Craveiro, I. M., Hortale, V. A., Oliveira, A. P., & Dus-sault, G. (2015). Desigualdades sociais, políticas de saúde e formação de médicos, enfermeiros e dentistas no Brasil e em Portugal. *Ciência & Saúde Coletiva*, 20(10), 2985-2998. doi:10.1590/1413-812320152010.19292014
- Freitas, R. J., Lima, E. C., Vieira, E. S., Feitosa, R. M., Oliveira, G. Y., & Andrade, L. V. (2015). Estresse do enfermeiro no setor de urgência e emergência. *Revista de Enfermagem UFPE On Line*, 9(Sup. 10), 1476-1483. doi:10.5205/reuol.8463-73861-2-SM.0910sup201514
- Gomes, S. F., Santos, M. M., & Carolino, E. T. (2013). Riscos psicossociais no trabalho: Estresse e estratégias de coping em enfermeiros em oncologia. *Revista Latino-Americana de Enfermagem*, 21(6), 1282-1289. doi:10.1590/0104-1169.2742.2365
- Lipp, M. E. (2014). *Manual do inventário de sintomas de stress para adultos de Lipp*. São Paulo, Brasil: Casa do Psicólogo.
- Martins, J. T., Bobroff, M. C., Ribeiro, R. P., Robazzi, M. L., Marziale, M. H., & Haddad, M. C. (2013). Significados de cargas de trabalho para enfermeiros de pronto socorro/emergência. *Ciencia, Cuidado e Saude*, 12(1), 40-46. doi:10.4025/ciencucuidsaude.v12i1.16459

- Menezes, S. R., Priel, M. R., & Pereira, L. L. (2011). Autonomia e vulnerabilidade do enfermeiro na prática da sistematização da assistência de enfermagem. *Revista da Escola de Enfermagem USP*, 45(4), 953-958. doi:10.1590/S0080-62342011000400023
- Oliveira, J. D., Alchiere, J. C., Pessoa Júnior, J. M., Miranda, F. A., & Almeida, M. G. (2013). Nurses' social representations of work-related stress in an emergency room. *Revista da Escola de Enfermagem USP*, 47(4), 984-989. doi:10.1590/S0080-623420130000400030
- Oliveira, J. D., Pessoa Júnior, J. M., Miranda, F. A., Calvalcante, E. S., & Almeida M. G. (2014). Stress of nurses in emergency care: A social representations study. *Online Brazilian Journal of Nursing*, 13(2), 150-157. doi:10.5935/1676-4285.20144342
- Papathanassoglou, E. D., Karanikola, M. N., Kalafati, M., Giannakopoulou, M., Lemonidou, C., & Albarran, J. W. (2012). Professional autonomy, collaboration with physicians, and moral distress among European intensive care nurses. *American Journal of Critical Care*, 21(2), 41-53. doi:10.4037/ajcc2012205
- Sadock, B. J., & Sadock, V. A. (2011). *Compêndio de psiquiatria: Ciência do comportamento e psiquiatria clínica* (9ª ed.). Porto Alegre, Brasil: Artmed.
- Santos, R. C., Miranda, F. A. (2014). The roles of the professional and the policies of mental health in the city of Natal, Brazil: An analytic study. *Online Brazilian Journal of Nursing*, 13 (sup. 1), 475-477.
- Selye, H. (2005). *Stress of life*. New York, USA: McGraw-Hill.
- Silva, A. H., & Fossá, M. I. (2015). Análise de conteúdo: Exemplo de aplicação da técnica para análise de dados qualitativos. *Qualitas Revista Eletrônica*, 16(1), 1-14. doi:10.18391/qualitas.v16i1.2113
- Teixeira, C. A., Reisdorfer, E., & Gherardi-Donat, E. C. (2014). Estresse ocupacional e coping: Reflexão acerca dos conceitos e a prática de enfermagem hospitalar. *Revista Enfermagem UFPE On Line*, 8(sup.1), 2528-2532. doi:10.5205/reuol.5927-50900-1-SM.0807supl201443

