DOI: 10.18554/reas.v8i2.3167

## FACTORS ASSOCIATED WITH STRESS AND COPING STRATEGIES OF ICU NURSING TEAM: INTEGRATIVE REVIEW

FATORES ASSOCIADOS AO ESTRESSE E COPING DA EQUIPE DE ENFERMAGEM DE UTI: UMA REVISÃO INTEGRATIVA\*

# FACTORES ASOCIADOS AL ESTRÉS Y COPING DEL EQUIPO DE ENFERMERÍA DE UTI: UNA REVISIÓN INTEGRATIVA

Tamara dos Santos Pelegrini Guida<sup>1</sup>, Alexandra Bulgarelli do Nascimento<sup>2</sup>

## **ABSTRACT**

**Objective:** Integrating the knowledge produced about the factors associated with stress and coping of nursing staff in the ICU. Methodology: Integrative Literature Review He used the key words: 'burnout', 'psychological stress', 'intensive care unit' and 'nursing' in Medline, Lilacs and BDEnf. Results: The articles 15 showed that the major stressors were' care to the support network of patients' and 'dealing with death'. As for coping, few strategies were mentioned, especially the 'investment in interpersonal relations' use of 'support services provided by the leadership' and 'support outside the working environment' - through informal social interactions, physical activity and leisure. Conclusions: The stress in response to the demands required for the work in the ICU should be investigated and the establishment of mitigating actions the effects of stress are paramount, to preserve the health of the professional, and the safety and quality of patient care.

Descriptors: Burnout, Professional; Stress, Psychological; Intensive Care Units; Nursing.

<sup>\*</sup> Pesquisa apresentada para conclusão do Curso de Pós-Graduação em Enfermagem em Terapia Intensiva Adulto pelo Centro Universitário São Camilo.

<sup>&</sup>lt;sup>1</sup> Enfermeira Pós-graduanda em Enfermagem em Terapia Intensiva Adulto do Centro Universitário São Camilo.

<sup>&</sup>lt;sup>2</sup> Enfermeira. Doutora pela Escola de Enfermagem da USP. Professora do curso de Pós-graduação em Enfermagem em Terapia Intensiva Adulto do Centro Universitário São Camilo.

#### **RESUMO**

**Objetivo:** Integrar o conhecimento produzido sobre os fatores associados ao estresse e *coping* da equipe de Enfermagem em UTI. **Metodologia:** Revisão integrativa da literatura que utilizou os descritores: 'esgotamento profissional', 'estresse psicológico', 'unidade de terapia intensiva' e 'enfermagem', nas bases de dados Medline, Lilacs e BDEnf. **Resultados:** Os 15 artigos demonstraram que os principais estressores foram o 'cuidado à rede de apoio dos pacientes' e o 'lidar com a morte'. Quanto ao coping, poucas estratégias foram mencionadas, destacando-se o 'investimento nas relações interpessoais', uso dos 'serviços de apoio disponibilizados pela liderança' e 'apoio fora do ambiente de trabalho' - através de interações sociais informais, atividade física e lazer. **Conclusões:** O estresse em resposta às demandas exigidas pelo trabalho na UTI deve ser investigado e o estabelecimento de ações minimizadoras dos efeitos do estresse são primordiais, visando preservar a saúde do profissional, e a segurança e qualidade do cuidado ao paciente.

**Descritores:** Esgotamento profissional; Estresse psicológico; Unidade de terapia intensiva; Enfermagem.

#### RESUMEN

Objetivo: Integrar el conocimiento producido sobre los factores asociados al estrés y coping del equipo de Enfermería en UTI. Metodología: Revisión Integrativa de la Literatura que utilizó los descriptores: "agotamiento profesional", "estrés psicológico", "unidad de terapia intensiva" y "enfermería", en las bases de datos Medline, Lilacs y BDEnf. Resultados: Los 15 artículos demostraron que los principales estresores fueron 'cuidado a la red de apoyo de los pacientes' y el 'tratar con la muerte'. En cuanto al coping, pocas estrategias fueron mencionadas, destacándose la 'inversión en las relaciones interpersonales', además del uso de los 'servicios de apoyo disponibilizados por el liderazgo' y 'apoyo fuera del ambiente de trabajo', a través de interacciones sociales informales, actividad física y el ocio. Conclusiones: El estrés en respuesta a las demandas exigidas por el trabajo en la UTI debe ser investigado y el establecimiento de acciones minimizadoras de los efectos del estrés son primordiales, visando preservar la salud del profesional, y la seguridad y calidad del cuidado al paciente.

**Descriptores:** Agotamiento Profesional; Estrés Psicológico; Unidades de Cuidados Intensivos; Enfermería.

## INTRODUCTION

Work is the central activity of our society, whether by its economic nature to provide the livelihood of the people, is the aspect of social recognition it provides. So it becomes important in the formation of the way of life and therefore the physical and mental health of indivíduo. In this way, it is clear that where the employee fits labor activity, there favoring their health

condition, providing opportunities for control the risks that may be due to occupational aspects or not, which shows the growing concern about worker health and safety in the workplace, in order to maintain a healthy workforce and produtiva.<sup>2</sup>

The World Health Organization (WHO) has been engaged in the study of work-related diseases, which include

personal characteristics of the worker and the risk of self work.<sup>2</sup> environment

In the latter aspect, related to the work environment, there are six groups of stressors, namely the intrinsic factors to work (poor working conditions, shift, hours, contributions payment, need for travel, exposure to risks, incorporating new technologies and quantitative load tasks), stressors roles (ambiguous or conflicted role, degree of responsibility towards people and processes), relationships at work (difficult relationships with immediate subordinates supervisors, peers, customers), stressors career (lack of career development and job insecurity due to reorganizations or decline the company), organizational structure (management of styles, lack participation and communication failures) and work-home interface (difficulty in managing the different social roles that people have, that is, in the workplace and in the intimate setting of your personal relations).<sup>3</sup>

Given the above, it is evident the need for managers to heed the aspects related to the work environment as well as to their role in the minimization of stress, thus making relevant planning and implementation of strategies that contribute to the adequacy of the performance environment work by detecting and acting on the causative factors of stress, prevention and / or redução.<sup>4</sup>

In addition, levels of temporary disability, absenteeism, early retirement and health risks associated with the occupation are alarming when related to occupational stress and mental health of workers<sup>5, 6</sup>, which brings financial losses to the company and consequences for employees, are in the professional, personal or social context.

Dejours (1992)<sup>7</sup> states that the term stress was first used by Canadian physician Hans Selye, to refer to a set of nonspecific reactions, chemical and structural order by a person in a situation tensão.<sup>8</sup>

Stress, according to Lazarus and Launier<sup>9</sup>, is defined as any event that exceeds the strength of an individual, of their social system, or its sources of adaptation<sup>10</sup>, configured as a set of nonspecific answers and that develops in three phases: alarm phase - characterized by acute episodes; resistance phase - when the acute manifestations disappear and establishes chronic experience of stress; and the exhaustion phase - when there is the return of the acute phase reactions together the chronic condition of stress, which can cause collapse of the body, called the General Adaptation Syndrome (GAS).<sup>11</sup>

Given this, it is evident that these phases may be present in the daily lives of health workers, as in the case of the nursing team - which consists of professionals who have as object, the health care of the other

and, concomitantly, are men and women with anxieties, fears, anxieties, and other feelings resulting from human experience - which denotes the existence of what Dejours (1992) calls the 'psychodynamics of work', that is, the understanding that people should be understood in their whole, rather than being subject to corporate central axis of the work.<sup>7</sup>

This insight is essential because when excessive stress produces various psychological and emotional consequences that result in mental fatigue, difficulty concentrating and loss of immediate memory, as well as anxiety attacks and mood<sup>12</sup> - which reinforces the relevance of approach theme of stress and mental health of the worker.

When considering the stress under the action of Nursing, Menzies<sup>13</sup> - in the 1960s - already addressed one of the most stressful professions<sup>10</sup>, since the workers of nursing experience situations of care for critical or unstable patients clinically<sup>14</sup> - showing that the nursing work process requires its professional stressful routines that demand be managed on a day-to-day health facilities.

Moreover, participation in the Intensive Care Unit (ICU), seems to bring other factors that can contribute to stress, such as daily exposure to indoors, artificial lighting, air conditioning and continuous noise, physical plant that can prejudicing

the visualization of critical patients, high level of technical and managerial requirements, quantitative deficiencies and qualification of workers, continuous introduction of new technologies, daily living with suffering and death, in addition to critical clinical condition of the patients, which requires solid knowledge to rapid decision-making, to allow survival.<sup>10</sup>

To deal with these situations of stress, coping strategies can be used aiming reframe stressful situations. strategies are termed coping, and consist of behavioral and cognitive actions used to solve or minimize the effects of stress. Coping can be understood from two types of strategies, namely, the strategy focused on the problem, which analyzes and defines the situation, seeking alternatives to solve it; and strategy centered on emotion, which is used when the individual realizes that the stressors can not be modified, it is necessary to continue interacting with them. In this type of strategy, included the avoidance, distancing, selective attention, comparisons and extraction positive aspects of events negativos. 15

The way that the coping strategies are defined is determined partly by internal and external resources of the individual, including, health, beliefs, responsibility, emotional support, social skills and resources materiais. However, by adopting coping, the professional can

develop protective behaviors such as: to strengthen family ties, adopting the habit of reading, practice their spirituality etc., but - also - can be used from harmful responses, such as the use of compulsive behaviors, including with the use of legal or illegal substances harmful to your health. <sup>16</sup>

From the presented, this study aimed to identify factors associated with stress and coping of ICU nursing staff, since it is essential that nurses who work in intensive care, understand the factors associated with stress present in this healthcare and stimulates environment coping practices among nursing workers, to contribute to a safe working environment and that translates into well-being of members of the nursing and multidisciplinary teams.

## **METHOD**

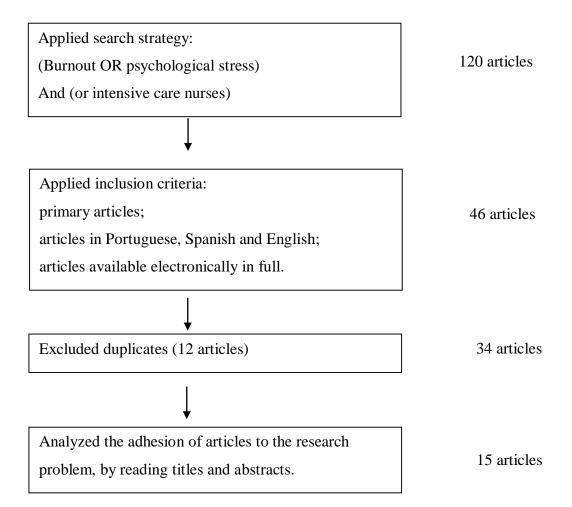
This study is an integrative review of literature, which provides synthesis of knowledge and incorporation of the applicability of results of significant studies in practice<sup>17</sup>, helping researchers to summarize the theoretical and empirical literature on the tema.<sup>18</sup>

Thus, we used the methodological strategy proposed by Whittemore; Knafl (2005)<sup>19</sup>, which aims to identify the research problem, clearly, and the search step in the literature, when using descriptors organized through the search strategy: ((professional OR psychological stress exhaustion) AND (ICU OR nursing)), which was applied in the following databases: Medical Literature Analysis and Retrieval System Online (MEDLINE), the Latin American and Caribbean Health Sciences (LILACS) and Base Nursing Data (BDENF).

Thus, we selected all primary articles published until December 31, 2017, in Portuguese, Spanish or English, and presented electronically available in full and who owned adherence to research problem, namely that set out to identify factors associated with stress and coping of ICU nursing team.

Initially, using the proposed search strategy were found 102 articles, of which the inclusion criteria were applied, and deleted the duplicates, leaving 34, whose titles and abstracts were read, allowing the selection of 15 articles that presented adherence problem study (Figure 1).

Figure 1 - Selection of articles. São Paulo, 2019.



The organization of the collected data was with the help of Microsoft Excel software, which were inserted data from the selected articles on the title, authors, year and publication of periodicals, as well as how to research participants, objectives, method adopted and the main conclusions of each study in order to identify the factors associated with stress and coping of ICU nursing team.

In the data analysis stage 19-20, they were organized into the following categories of analysis: 'stressors of nursing staff in the ICU' and 'Nursing team Coping in ICU' - the purpose of this step was to extract the meaning present in selected studies and who owned membership to respond to the proposed research problem.

**RESULTS** 

Among the evidence related to stressors, 46,7% (7) of the studies mentioned the 'care to the support network of patients', and 46,7% (7) said 'the deal with death', considered so as the main stressors of ICU nursing team. Among other evidence, the 'poor interpersonal relationships' (6) and the 'physical environment' (6) were also found in 40% of articles.

As for the evidence regarding the nursing team coping in ICU, there was

emphasis on the 'investment in interpersonal relations' (4), present in 26,7% of the studies; and 'support services provided by the leading' (3) as well as the 'support outside the work environment' (3), both cited - each - 20% of the studies (Chart 1).

Chart 1 - Characteristics and evidences of the studied publications. Sao Paulo, 2019.

	Evidences			
Title	Authors / Year	Journal	Referring to the stressors ICU nursing team	Referring to the coping ICU nursing team
Stress and coping among intensive care unit nursing professionals and semi-intensive	Silva et al, 2017	Revista de Enfermagem UFPE On Line	Devaluation professional Few growth prospects Not enough time to do the job Innovations in hospital Age Professional Experience time	Greater effort and engagement at work Social support outside of work Recreation
The depletion of nursing professionals: an integrative review of the ICU burnout	Machado et al, 2012	Revista de Pesquisa: Cuidado é fundamental Online	Dealing with death Care to patient support network Physical environment	-
Stress at work and the prevalence of common mental disorders among nursing workers	Silva et al, 2011	Revista de enfermagem UFPE on line	Dealing with death Care to support network of patients Physical Environment Psychological demands Rank of nurses Lack of human resources Workload Not enough time to do the job Blurring the professional role Job dissatisfaction Poor interpersonal relationships Physical environment	-

psychosocial aspects and burnout among intensive care nursing workers	Lima, 2015	Fundação Oswaldo Cruz	Workload Poor interpersonal relationships Lack of human resources Work overload	-
The work of nursing professionals in intensive care units in the care of cancer patients	Herc et al, 2014	Revista Brasileira de Cancerologia	Age Professional Salary Poor interpersonal relationships Care to patient support network Dealing with death Work overload Doubles working hours Physical environment	Physical activity Recreation Use of permanent education policy Support services provided by the leadership Investment in interpersonal relationships at work
Pleasure and pain: evaluation of critical care nurses in light of psychodynamics of work	Fields et al, 2014	Escola Anna Nery Revista de Enfermagem	Psychological demands Poor interpersonal relationships Work overload Decision making Dealing with grief Dealing with death Concerns about patient safety	Investment in interpersonal relationships at work
Stress of professional nurses working in intensive care unit	Monte et al, 2013	Acta Paulista de Enfermagem	Not enough time to do the job Physical environment Rank of nurses Care to patient support network Dealing with grief Dealing with death Lack of human resources Lack of inputs Frequent emergencies Control of materials used and equipment	-

Evaluation of stress and burnout syndrome in nurses working in a intensive	Affection ; Teixeira, 2009	Online Brazilian Journal of Nursing	Exertion Blurring the professional role Lack of human resources	
care unit: a qualitative study			Physical environment Work shifts Double workday	
			Salary Age Professional	-
			Time experience Powerlessness in the face of tasks Not enough time to do the job	
St.	Contlant	Due Lutie American de	Solve unforeseen Rank of nurses	
Stress in nurses working in intensive care unit	Gentlem an et al, 2008	Rev Latino-Americana de Enfermagem.	Job dissatisfaction Work shifts Poor interpersonal relationships	
			Powerlessness in the face of tasks Care to patient support network Serious patient care	-
Grief and burnout in the PICU	Crowe et al, 2017	Pediatrics	-	Discuss challenging cases
Promoting staff resilience in the pediatric intensive care unit	Jane Lee et al, 2015	American Journal of Critical Care	Ethical dilemmas Care to patient support network Dealing with grief Dealing with death Limited resources	Investment in interpersonal relationships at work Social support outside of work
			Poor interpersonal concerns with patient safety	support services provided by the leadership

The prevalence of compassion fatigue and burnout among healthcare professionals in intensive care units: a systematic review	Van Mol et al, 2015	PLos One	-	Support from senior support services provided by the leadership Mindfulness meditation
Burnout and traumatic stress in staff working in pediatric Intensive Care: associations with resilience and coping strategies	Colville et al, 2015	Intensive Care Medicine	-	Investment in interpersonal relationships at work Social support outside of work Support of superiors.
Ethical decision making in intensive care units: Burnout risk factor? Results from a multicentre study Conducted with physicians and nurses	Tan et al, 2014	Journal of Medical Ethics	Dealing with death  Care to patient support network	Involvement of nurses in the decision-making process
Preliminary study on occupational stress of doctors and nurses in pediatric and neonatal ICU: the balance between effort and reward	Fogaça et al, 2010	Revista Latino-Americana de Enfermagem	Devaluation professional	-

## **DISCUSSION**

Among the stressors mentioned, the 'care to the support network of patients' and 'dealing with death' were highlighted by the professional participants of the selected studies. Although it is the ideal environment for the care of critical patients, the ICU generates a huge stress on the nursing staff, as well as dealing with situations of death and life of the patient, the team deals with the feelings of the family and also with their own emotions and conflicts - that denotes what Dejours (1992) argues in finding that the separation of the human being of being professional is not possible, which ultimately - imposes health facilities the need to adopt measures they can respond to the complexity of the nurse in the ICU.<sup>7</sup>

This was evident in Monte et al (2013), which noted that among the main factors related to stress in the health team and present in the intensive care setting there is the need to prepare to deal with death and sofrimento.<sup>21</sup>

So experience the death and the feelings of the support network of patients before their health status is a condition inherent in ICU professionals - subjecting them to a multidimensional process of work requires different skills, including the emotional, the denoting the need for the existence of a support for discussions.

Such support was mentioned in the evidence of this study as a coping strategy, in which professionals have suggested the existence of psychological support systematic professionals to face the difficulties in their daily work, as well as other support services provided by the leadership, providing discussions about spiritual care, social work, palliative care, ethical dilemmas and psychology, including discussions of challenging cases, staff training to deal with death and family - your fears and possible anxiety, your uncontrolled forward the process of health and disease.

This proposal is in line to Silva's findings (2000), which referred to the need for professionals working in the ICU to create a good relationship with family, facilitating their participation in the treatment of the patient in order to prepare her and accompany her throughout the process of admission, identifying and clarifying their doubts, noting the reactions and behaviors and especially understanding their sentimentos. <sup>22-23</sup>

The literature suggests that conflicts in interpersonal relations are one of the sources of stress for greater importância.<sup>24-</sup>
<sup>25</sup> Leite and Vila (2005) have argued that one of the main factors causing stress to the multidisciplinary team is the team itself, which may be explained by the lack of

commitment of some of its members, intervening negatively on the quality of patient care. This evidence dialogues directly with the results of this study, which showed this as stressful on the nursing team, which points to the relevance of actions aimed at mediating these conflicts, through the social support in the workplace, fostering a good relationship between the team, constructive dialogue and reflection among colleagues, valuing honesty, establishing respect between the parties and motivating the commitment with the assistance.23

As for the investment in interpersonal relationships, as found evidence related to coping in this study, Formozo (2012) states that it is essential in the development of care with a view to strengthen the humanization, covering elements such as empathy and listening ativa.<sup>26</sup>

Therefore, there is the need for constant training of professionals, as well as technical procedures, namely that also worry about professional training to deal with the process of death <sup>26</sup>. As evidence of this study, such training should be carried out through the 'use of permanent education policy', which contributes to the updating of knowledge and allows the breakdown of occupational routine, promoting the adaptation of the individual to better cope

with situations of everyday life, improving their self-esteem and subsidizing to handle estresse.<sup>27,28</sup>

The ICU work environment is stressful, the activities require profuse degree of responsibility and qualification, involving intense emotional distress. <sup>29</sup> Moreover, the physical environment involves factors such as inadequate lighting and ventilation, excessive noise and lack of material resources, noted the results brought by Coronett et al (2006).<sup>27</sup> These stressors were found also in this study - as denoted in the physical environment, some important protective measures of routine work that can be carried out: avoid the noise caused by the dialogue out loud next to patients, clinics discussions in appropriate environments, reducing equipment alarm sounds whenever possible, bells control, alarms and cell phones, besides the implementation of a continuous education program aligned for the development of actions directed to the interrelationships and emotional aspects.<sup>30</sup>

With regard to the nurses' performance, it is emphasized that he performs many activities with a high degree of difficulty and responsibility and is considered the mediator between the nursing staff, the multidisciplinary team, assisted patient and family, seeking a balance between the relationships

developed, which can generate estresse.<sup>31</sup> In the articles analyzed in this study, we identify as 'being a nurse' is related to stress, for example, when considering professional devaluation, reduced growth technological innovations prospects, continuous, the age of the professional, the experience of time, the need for decisionmaking, the hierarchical position of the nurse, the responsibility for the control of and equipment, cope with materials unforeseen and job dissatisfaction.

Social support can be defined as any information. material assistance and protection offered by social groups and/or institutions such as the family and collective work, and that result in emotional effects positivos.<sup>32</sup> Among the evidence found for the nursing staff of coping ICU, it was possible to highlight the social support as the main strategy used, it is present in the workplace, in the institution, or leadership among peers, or even out of work, with family, contact with friends and others. So when it is the 'social support in the workplace', the role of leadership appears as primordial, encourages working together, promotes multidisciplinary work, and minimizes the effect resulting from stress.<sup>33</sup> Theorell (2000)argues that in the relationship between psychological demands and control at work, the support of work colleagues and the institution itself can act as a protective action against stress.<sup>34</sup>

Among the articles analyzed, the 'social support outside the work environment' was related to informal social interactions, and the practice of physical activity and leisure. According to Pereira and Bueno (1997), leisure plays an essential role, as an alternative means of relaxation and relief from the difficulties of everyday life, whether at the personal level or profissional.<sup>35</sup>

As to limitations of the study, it was found that there are numerous stressors for nursing staff in the ICU, but little is said about coping strategies, and if there is knowledge of the professional regarding its importance, which indicates the need for new studies with this type of targeting.

Therefore, among its responsibilities, the nurse should assess the environment and professionals in the industry routinely investigate the presence of factors causing stress, respecting the individuality of each team member, and act to provide enabling environment and access to networks support available, aiming to enhance coping strategies and stress management.

#### CONSIDERATIONS

The ICU nursing team carries out its work in an environment of numerous demands, both physical as mental, which are imposed on the professional and are peculiar to the ICU sector, which contributes to the stress establishment - as evidenced in this study to identify which among the stressors of ICU nursing team stood out, especially the 'care to the support network of patients' and 'dealing with death.'

Thus, the stress in response to many demands required for the work in the ICU should potentially be investigated, and the establishment of actions that aim to solve or minimize its effects are paramount.

REFERÊNCIAS

- 1. Ministério da Saúde (Brasil). Doenças relacionadas ao trabalho: manual de procedimentos para os serviços de saúde. Brasília, DF: Ministério da Saúde; 2001.
- 2. Organisation Mondiale de la Santé. Identificación de enfermedades relacionadas com el trabayo y medidas para combatirlas. Genebra: OMS; 1985.
- 3. Stacciarini JMR, Tróccoli BT. The stress in nursing profession. Rev Latinoam Enferm. 2001; 9(2):17-25.
- 4. Inouel KC, Versa GLG, Murassaki ACY, Melo WA, Matsuda LM. Estresse ocupacional em enfermeiros intensivistas que prestam cuidados diretos ao paciente crítico. Rev Bras Enferm. 2013; 66(5):722-29.
- 5. Fogaça MC, Carvalho WB, Citero VA, Martins LAN. Fatores que tornam estressante o trabalho de médicos e enfermeiros em terapia intensiva pediátrica e neonatal: estudo de revisão bibliográfica.

Regarding the *coping* ICU nursing team, few strategies have been mentioned denoting the limitation of this study. However, the highlight was the 'investment in interpersonal relations' use of 'support services provided by the leadership' and 'support outside the working environment' - through informal social interactions, physical activity and leisure - which contributes to an environment safe working and provides well-being and therefore ensures the safety of patient care, support your support network and, ultimately, the quality of care.

Rev Bras Ter Intensiva. 2008; 20(3):261-66.

- 6. Vieira LC, Guimarães LAM, Martins DA. Saúde mental e trabalho. 3ed. São Paulo: Casa do Psicólogo; 2003.
- 7. Dejours C. A loucura do trabalho: estudo de psicopatologia do trabalho. 5ed. São Paulo: Cortez; 1992.
- 8. Carvalho DV, Lima FCA, Costa TMPF, Paula Lima EDR. Enfermagem em setor fechado estresse ocupacional. Reme Rev Min Enferm. 2004; 8(2):290-94.
- 9. Lazarus RS, Launier S. Stress related transaction between person and environment. In: Dervin LA, Lewis M. Perspectives in international psychology. New York: Plenum; 1978. p. 287-327.
- 10. Andolhe R, Barbosa RL, Oliveira EM, Costa ALS, Padilha KG. Estresse, coping e burnout da Equipe de enfermagem de unidades de terapia intensiva: fatores associados. Rev Esc Enferm USP. 2015; 49(N. Esp):58-64.

- 11. Figueiras JC, Hippert MIS. A polêmica em torno do conceito de estresse. Psicol Ciênc Prof. 1999; 19(3):40-51.
- 12. Malagrias LEN, Fiorito ACC. Avaliação do nível de stress de técnicos da área de saúde. Estud Psicol. (Campinas). 2006 dez; 23(4):391-98.
- 13. Menzies IEP. Nurses under stress. Int Nurs Rev. 1960; 7(6):9-16.
- 14. McCarthy VJC, Power S, Greiner BA. Perceived occupational stress in nurses working in Ireland. Occup Med. 2010; 60(8):604-10.
- 15. Silva GAV, Silva GSA, Silva RM, Andolhe R, Padilha KG, Costa ALS. Estresse e coping entre profissionais de enfermagem de unidades de terapia intensiva e semi-intensiva. Rev Enferm UFPE on line. [Internet]. 2017 [citado em 23 jan 2019];11(Supl 2):922-31. Disponível em:
- https://periodicos.ufpe.br/revistas/revistaen fermagem/article/view/13461/16153
- 16. Rodrigues AB, Chaves EC. Fatores estressantes e estratégias de coping dos enfermeiros atuantes em oncologia. Rev Latinoam Enferm. 2008; 16(1):1-5.
- 17. Souza MT, Silva MD, Carvalho R. Revisão integrativa: o que é e como fazer. Einstein. 2010; 8(1):102-6.
- 18. Jensen R, Lopes MHBM. Enfermagem e lógica fuzzy: uma revisão integrativa. Rev Latinoam Enferm. 2011; 19(1):1-8.
- 19. Whittemore R, Knafl K. The integrative review: updated methodology. J Adv Nurs. 2005; 52(5):546-53.
- 20. Cooper H. Synthesizing research: a guide for literature reviews: Thousand Oaks, CA: Sage Publications; 1998.
- 21. Monte PF, Lima FET, Neves FMO, Studart RMB, Dantas RT. Stress among professional nurses working in intensive care units. Acta Paul Enferm. [Internet]. 2013 [citado em 23 jan 2019]; 26(5):421-27. Disponível em:
- http://www.scielo.br/pdf/ape/v26n5/en\_a0 4v26n5.pdf

- 22. Silva MJP. Humanização em UTI. In: Cintra EA, Nishide VM, Nunes WA. Assistência de enfermagem ao paciente crítico. São Paulo: Atheneu; 2000. p. 1-11.
- 23. Leite MA, Vila VSC. Dificuldades vivenciadas pela equipe multiprofissional na unidade de terapia intensiva. Rev Latinoam Enferm. 2005; 13(2):145-50.
- 24. Stacciarini JMR, Tróccolli BT. Estresse ocupacional. In: Mendes AM, Borges LO, Ferreira MC, organizadores. Trabalho em transição, saúde em risco. Brasília, DF: Ed. UnB; 2002. p. 25-42.
- 25. Farias SNP, Mauro MYC, Zeitoune RCG. Questões Legais sobre a saúde do trabalhador de enfermagem. Rev Enferm UERJ. 2000; 8(1):28-32.
- 26. Formozo GA, Oliveira DC, Costa TL, Gomes AMT. As relações interpessoais no cuidado em saúde: uma aproximação ao problema. Rev Enferm UERJ. 2012; 20(1):124-27.
- 27. Coronetti A, Nascimento ERP, Barra DCC, Martins JJ. O estresse da equipe de enfermagem na unidade de terapia intensiva: o enfermeiro como mediador. ACM Arq Catarin Med. 2006; 35(4):36-43.
- 28. Schwartz S. O estresse e como viver com ele: implicações para a prática de enfermagem. In: Shumaker WC. Tratado de terapia intensiva. São Paulo: Panamericana; 1992. p. 1413-16.
- 29. Ferrareze, MVG, Ferreira, V, Carvalho, AMP. Percepção do estresse entre enfermeiros que atuam em Terapia Intensiva. Acta Paul Enferm. 2006; 19(3):310-15.
- 30. Macedo ISC, Mateus DC, Costa EMGC, Asprino ACL, Lourenço E. Avaliação do ruído em unidades de terapia intensiva. Braz J Otorhinolaryngol. 2009; 75(6):844-46.
- 31. Ferreira LRC, Martino MMF. O estresse do enfermeiro. Rev Ciênc Méd., (Campinas). 2006; 15(3):241-48.
- 32. Gonçalves TR, Pawlowski J, Bandeira DR, Piccinini CA. Avaliação de apoio social em estudos brasileiros:

aspectos conceituais e instrumentos. Ciênc Saúde Colet. 2011; 16(3):1755-69.

- 33. Reis ALPP, Fernandes SRP, Gomes AF. Estresse e fatores psicossociais. Psicol Cienc Prof. 2010; 30(4):712-25.
- 34. Theorell T. Working conditions and health. In: Berkman L, Kawachi I. Social epidemiology. New York: Oxford University Press; 2000. p. 484-493.
- 35. Pereira MER, Bueno SMV. Lazer Um caminho para aliviar as tensões no

ambiente de trabalho em UTI: uma concepção da equipe de enfermagem. Rev Latinoam Enferm. 1997; 5(4):75-83.

RECEIVED: 04/09/2018 APPROVED: 17/02/2019 PUBLISHED: 12/2019