

OCCUPATIONAL STRESS AT WORK IN NURSING IN BRAZIL: AN INTEGRATIVE REVIEW

Estresse ocupacional no trabalho em enfermagem no Brasil: uma revisão integrativa

Estrés laboral del trabajo de enfermería en Brasil: una revisión integrativa

Review Article

ABSTRACT

Objective: To describe the triggering factors of occupational stress in nursing professionals as well as the risks associated with its development. **Methods:** The study constitutes an integrative review of the scientific literature on triggering factors of occupational stress in nursing professionals and which conditions they are associated with. **Results:** The integrative review analysis method was based on the categorization of the information collected in the final sample of articles. Thus, they were interpreted and grouped into three categories for understanding of the phenomenon: 1) Signs, symptoms and pathologic conditions associated with occupational stress; 2) Association between occupational stress and the burnout syndrome; 3) Risk of occupational stress and areas of nursing practice. **Conclusion:** The nursing professional is increasingly prone to occupational sickening motivated by stress in the workplace. On the one hand, the population needs nurses; on the other, the nursing workers also need favorable organizational conditions to develop their role, which is very important for all who live in society.

Descriptors: Nursing; Stress, Brazil.

RESUMO

Objetivo: Descrever os fatores desencadeantes do estresse ocupacional em profissionais da enfermagem, bem como os riscos relacionados com o desenvolvimento desse estresse. **Métodos:** Constitui uma revisão integrativa da literatura científica sobre fatores desencadeantes do estresse ocupacional em profissionais da enfermagem e quais patologias estão associadas. **Resultados:** O método de análise da revisão integrativa baseou-se na categorização das informações coletadas na amostra final dos artigos. Assim, foram interpretados e agrupados em três categorias para compreensão do fenômeno: 1) Sinais, sintomas e patologias associadas ao estresse ocupacional; 2) Relação do estresse ocupacional com a síndrome de burnout; 3) Risco de estresse ocupacional e área de atuação em enfermagem. **Conclusão:** O profissional de enfermagem está cada vez mais predisposto ao adoecimento ocupacional motivado por estresse no ambiente de trabalho. Se por um lado, a população necessita dos enfermeiros, por outro, os trabalhadores da enfermagem também precisam de condições organizacionais favoráveis para desenvolver o seu papel que é suma importância para todos que vivem em sociedade.

Descritores: Enfermagem; Estresse; Brasil.

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RESUMEN

Objetivo: Describir los factores desencadenantes del estrés laboral de profesionales de enfermería así como los riesgos relacionados al desarrollo de dicho estrés. **Métodos:** Revisión integrativa de la literatura científica sobre los factores desencadenantes del estrés laboral de profesionales de enfermería y cuales las patologías asociadas a él. **Resultados:** El método de análisis de la revisión integrativa estuvo basado en la categorización de las informaciones recogidas de la muestra final de los artículos. De esa manera, fueron interpretados y agrupados en tres categorías para la comprensión del fenómeno: 1) Signos, síntomas y patologías asociadas al estrés laboral; 2) Relación del estrés laboral con el síndrome de burnout; 3) Riesgo del estrés laboral y área de actuación en enfermería. **Conclusión:** El profesional de enfermería está más predispuesto al padecimiento laboral motivado por el estrés en el ambiente de trabajo. Si por un lado, la población necesita de enfermeros, de otro lado, los trabajadores de enfermería también necesitan de condiciones de organización favorables para el desarrollo de su papel que es muy importante para todos los que viven en sociedad.

Descriptor: Enfermería; Agotamiento Profesional; Brasil.

INTRODUCTION

Workers' health is defined as a set of different activities which, by means of either epidemiological and health surveillance, are aimed at promoting, protecting, recovering and rehabilitating the health of workers who have been affected by risks and injuries caused by working conditions⁽¹⁾.

The National Policy on Workers' Health was established by Ordinance no. 1823 of August 23, 2012⁽²⁾. Its purpose is to define the principles, guidelines and strategies to be observed in a holistic way with a tripartite dimension, aiming at the promotion and protection of workers' health, thus minimizing the morbimortality resulting from developmental and productive processes⁽²⁾.

In compliance with the definitions and purposes of the above-mentioned work activities, emphasis is placed on nursing, which is, in turn, an area that has a unique apparatus of technical and scientific knowledge, supported and reproduced by a set of social, ethical and political practices that is expressed through teaching, research and care activities⁽³⁾.

Despite the laws ensuring the preservation of the workers' integrity, as already mentioned, nursing professionals constitute an audience that, most of the time, care for other people and forget about themselves and the work environment. These professionals have been developing illnesses every day, due to unhealthy

working conditions and unfavorable environments for the development of their practices⁽⁴⁾.

In their daily practice, these professionals, when providing direct assistance to the patient, are exposed to several risks related to the work activity that can be affected by intrinsic and extrinsic factors, such as chemical, physical, mechanical, biological and ergonomic risks, which can cause occupational injury⁽⁴⁾. These professionals are also exposed when facing factors that pose them emotional demands, directly related to the suffering of the patients and relatives being assisted⁽⁵⁾.

A major determinant of all these causes and the development of various pathologic conditions is stress. This condition is characterized as a moment of tension that causes an imbalance in the functioning of organisms, resulting from situations regarded new or at risk and that surpass the adaptive capacity of the human being⁽⁶⁾.

Stress can also be associated with other conditions such as anxiety, depression and the burnout syndrome. The dissatisfaction with the work environment, the workers' socioeconomic condition, the lack of control over the work, and the low support and social recognition of their practices feature as the determining factors for the onset of stress⁽⁷⁾.

Nursing workers in their daily practice provide direct assistance to the patient and are exposed to several risks related to the work activity and, consequently, can be affected by several pathologies, among them, the occupational stress. In this sense, the present review is based on the following research problem: What are the associated factors and the risks of occupational stress development in nurses in Brazil?

Thus, from an integrative review of the scientific literature, the present study aims to describe the triggering factors of occupational stress in nursing professionals, as well as the risks associated with its development.

METHODS

This study constitutes an integrative review of the scientific literature on the triggering factors of occupational stress in nursing professionals and which pathologic conditions are associated. This type of literature review was chosen for accomplishment of the intended objective because it shows the synthesis of multiple scientific studies⁽⁸⁾. Moreover, it allows general conclusions of a particular area of study, corroborating for the deepening and propagation of the knowledge concerning the analyzed problems and how it has been studied in the current researches⁽⁸⁾.

The integrative review is a study based on the analysis of relevant research from secondary sources by means of a bibliographic survey that gathers knowledge about

the phenomenon to be investigated. It is a careful and conscientious research technique, with methodological rigor, which increases the credibility and depth of conclusions that can contribute to reflection on the accomplishment of further studies, thus also contributing to making decisions that seek to improve recent evidence⁽⁸⁾.

The present study opted for a research in scientific periodicals, by searching on the following databases: Virtual Health Library (VHL), Capes Periodicals, and the United States National Library of Medicine (PubMed).

In the electronic search of the scientific articles, indexed in the mentioned databases, the study used the following Health Science Descriptors (DeCS), with their combinations in English and Portuguese languages: Nursing (Enfermagem), Stress (Estresse) and Brazil (Brasil).

The following inclusion criteria were used to select the studies: being indexed in the respective databases; direct relation with the descriptors; research developed in Brazil; published in Portuguese and English Languages; publication period from 2010 to 2015; studies with field research; and articles available online. Literature reviews, dissertations, theses and editorials were excluded from this study. The data collection was performed following the inclusion criteria in October 2015.

When the descriptors were associated, 254 references were found in the VHL, 60 articles in PubMed and 24 in Capes Periodicals. After applying the inclusion criteria, 129 (VHL), 25 (PubMed) and 11 (Capes) remained.

In the first phase, the titles of the articles and their summaries were read. After this analysis, 21 articles of the VHL, 6 of Capes Periodicals and 8 articles of PubMed were selected. When comparing the search results among the databases, of 35 articles in total, 5 were repeated, thus leaving 31 publications selected for full reading of the texts.

In the second phase, a complete reading of the articles was done, being excluded the publications that, despite containing the descriptors, did not directly address the subject matter of this research. After this phase, 22 articles were selected to compose the final sample for the present study.

In the third and last phase, the 22 articles were analyzed from the identification of categories and variables based on the objective of the present study. The key concepts were highlighted and the analysis followed the recommendations of the specific literature on the integrative literature review⁽⁸⁾.

RESULTS

The articles referring to the theme of occupational stress in nurses in Brazil presented variation in the years

of publication, with periods of greater and lesser interest in the subject. In the year 2015 only two publications were found^(9,10); there were four in 2014⁽¹¹⁻¹⁴⁾, five in 2013⁽¹⁵⁻¹⁹⁾, two in 2012^(20,21), five in 2011⁽²²⁻²⁶⁾ and four in 2010^(5,27-29).

The studies are characterized by a percentage of methodological approaches of 72.7% (16) quantitative studies, 22.7% (5) qualitative studies, and 4.6% (1) that used both approaches.

Chart I describes the set of 22 articles selected in this study. There is a description of the studies included in this integrative review, according to authors, periodicals, year of publication and type of study.

DISCUSSION

The integrative review analysis method was based on the categorization of the information collected in the final sample of articles. Thus, they were interpreted and grouped into three categories for understanding of the phenomenon: 1) Signs, symptoms and pathologic conditions associated with occupational stress; 2) Association between occupational stress and the burnout syndrome; 3) Risk of occupational stress and areas of nursing practice.

Signs, symptoms and pathologic conditions associated with occupational stress

Occupational stress can lead to the development of various diseases or be associated with other pathologic conditions that determine the absenteeism of the nursing professional, thus causing disadvantages to both the worker and the employer⁽⁹⁾.

Nursing is a profession of female predominance and, besides the wear due to the complexity of the profession, it should be associated with the women's extra workload within their home and their family representation. The woman is often the provider and coordinator of family matters, considered also an additional working day. These are factors that directly cooperate in the quality and life, decrease in performance, precariousness of the nursing care provided to third parties, and labor dissatisfaction, leading to the dissemination of signs, symptoms and pathologic conditions arising from occupational stress⁽¹⁷⁾.

In summary, the studies point out a variety of signs and symptoms, and pathologic conditions caused by occupational stress, namely: a) Signs and Symptoms: Headache, myalgia followed by a feeling of fatigue, morning sickness, trouble sleeping or interrupted sleep, stomach upset, tachycardia, muscle tremors, inappetence, shortness of breath and facial flushing, sensations of needling in the body, physical exhaustion, emotional conflicts, tiredness, cardiovascular changes, low back pain, depressive

Chart I - Characterization of the articles of the final sample, in descending order by year of publication. Goiânia, 2015.

Authors	Periodical / Year of publication	Type of Study / Instrument
Silva et al ⁽⁹⁾	Rev. Bras. Ter. Intensiva (2015)	Descriptive, quantitative, cross-sectional study using Maslach Burnout Inventory and the Self-Report Questionnaire
Zavalis et al ⁽¹⁰⁾	Revista de Pesquisa: Cuidado é Fundamental Online (2015)	Descriptive, correlational, quantitative study using a non-validated questionnaire
Dalmolin et al ⁽¹¹⁾	Revista Latino Americana de Enfermagem (2014)	Quantitative survey using Moral Distress Scale (MDS) and Maslach Burnout Inventory (MBI)
Oliveira et al ⁽¹²⁾	Revista de Enfermagem da UFRJ (2014)	Quantitative study using Relationship Anxiety and Work Questionnaire (QRTCAT) elaborated based on the AUDIT
Ramos et al ⁽¹³⁾	Revista de Pesquisa: Cuidado é Fundamental Online (2014)	Descriptive qualitative research
Prochnow et al ⁽¹⁴⁾	Revista Latino Americana de Enfermagem(2014)	Cross-sectional epidemiological study with quantitative approach using Job Stress Scale (JSS)
Oliveira et al ⁽¹⁵⁾	Revista de Enfermagem da UFRJ (2013)	Quantitative research Questionnaire on Consumption Relationship with Labor (QRCAT) based on the AUDIT
Oliveira et al ⁽¹⁶⁾	Revista de Enfermagem da UFRJ (2013)	Qualitative research with interview scripts
Oliveira et al ⁽¹⁷⁾	Revista da Escola de Enfermagem da USP (2013)	Exploratory and descriptive study with qualitative approach
Inoue et al ⁽¹⁸⁾	Revista Brasileira de Enfermagem (2013)	Analytical cross-sectional study with quantitative approach
Lima et al ⁽¹⁹⁾	Revista de Pesquisa: Cuidado é Fundamental Online (2013)	Descriptive study with quantitative approach, using semi-structured questionnaire
Fernandes et al ⁽²⁰⁾	Revista de Pesquisa: Cuidado é Fundamental Online (2012)	Descriptive study with quantitative approach using the Maslach Burnout Inventory (MBI)
Maia et al ⁽²¹⁾	Revista de Pesquisa: Cuidado é Fundamental Online (2012)	Exploratory cross-sectional study of quantitative nature using the Lipp Stress Symptom Inventory for Adults (LSSI)
Farias et al ⁽²²⁾	Revista da Escola de Enfermagem da USP (2011)	Quantitative / qualitative study using the Occupational Stress Indicator (OS) and semi-structured questionnaire
Mininel et al ⁽²³⁾	Revista Latino Americana de Enfermagem (2011)	Descriptive study with qualitative approach
Griep et al ⁽²⁴⁾	Revista de Saúde Pública (2011)	Cross-sectional study with quantitative approach using multidimensional questionnaire
Silva et al ⁽²⁵⁾	Revista de Saúde Pública (2011)	Cross-sectional study with quantitative approach, using adapted versions of the <i>Job Stress Scale - Short Version</i> , the <i>Effort Reward Imbalance</i> , SF 36 and the <i>Work Ability Index</i> .
Linch et al ⁽²⁶⁾	Revista Gaúcha de Enfermagem (2011)	Cross-sectional study with quantitative approach, using the Stressor Scale and the Scale of Symptoms Presented by Nurses
Dalri et al ⁽⁵⁾	Revista Ciência y Enfermería (2010)	Non-experimental study with quantitative data analysis, using a Codebook questionnaire
Rocha et al ⁽²⁷⁾	Revista da Escola de Enfermagem da USP (2010)	Descriptive and comparative cross-sectional study, with quantitative approach, using Bianchi Modified Stress Scale and the Pittsburgh Sleep Quality Index Questionnaire - PSI
Secco et al ⁽²⁸⁾	SMAD. Revista Eletrônica Saúde Mental Álcool e Outras Drogas (2010)	Qualitative study with content analysis technique
Feliciano et al ⁽²⁹⁾	Revista de Saúde Pública (2010)	Research with qualitative approach, using semi-structured interviews

syndromes, panic syndrome, emotional exhaustion, palpitations, cold extremities, frequent colds, confusion, loss of sense of humor, anger, frustration, worry, fear, irritability, impatience, moderate-scale nausea, impotence, frustration, visual discomfort, and anxiety^(5,9-14,16-29). b) Pathologies: Acute myocardial infarction, neurological mental disorders, psychiatric disorders, depressive syndromes, panic syndrome, hypertension, gastritis, somatic diseases and burnout syndrome^(5,9-11,13,14,16-29).

In view of all these associated conditions, whether due to the cause or the effect of occupational stress, the nursing professional's body needs to mobilize extra energy to resume its initial balance⁽¹⁹⁾.

Association between occupational stress and the burnout syndrome

Some studies have demonstrated the burnout syndrome as a recurrent associated pathologic condition and with prevalence among the diseases that can be triggered and/or as an effect of occupational stress^(9,11,19-21,29).

This syndrome is characterized by three dimensions: emotional exhaustion, professional fulfillment and depolarization. A survey of 375 nursing workers showed a correlation between moral distress and burnout syndrome as a potential source of disease development⁽¹¹⁾.

Moral distress is directly related to the development of the burnout syndrome, which can occur due to several factors, among them, the assistance practices and the exacerbated involvement of the nursing staff with care⁽¹¹⁾. In most cases, it develops along a period of 10 years of direct exposure to the work activities associated with daily problems such as traffic and relationships between patients and caregivers^(9,21).

The nursing staff often transcends their role as caregiver and begins to attribute to themselves the sufferings and problems experienced by the patients who are being assisted, wishing to play the role of patient's advocate, posing to the nursing professional a stress concerning the defense of the integrity and values of care⁽¹¹⁾.

Another determining factor in which the nursing team has difficulty refers to sharing of knowledge. The participation in the multiprofessional team can become deficient, resulting in conflicts, stress. Often, they can not manage to be effective members of a multiprofessional team with an emphasis on interdisciplinarity^(19,29).

The strong work demand and the pressure exerted on the nurse by the managers and clients in the resolution of the assistance, besides the enormous cognitive and emotional investment involved in the direct assistance to the patient,

are factors that contribute in large scale to triggering the burnout syndrome^(19,29).

Most of the times, the worker is dissatisfied with himself, with specific depressive and irritation characteristics, and cannot manage to fulfil his own demands, as his intrapersonal relationship is colliding. Such characteristics can generate conflicts with the management, with the staff, and the dismissal of the professional from his clientele as a form of refuge⁽²⁰⁾.

Risk of occupational stress and areas of nursing practice

The studies identified that nursing care comprised in high and medium complexity services, such as pre-hospital care (PHC), urgent care (UC), intensive care unit (ICU), public urgent and emergency care units, emergency room (ER), hemodynamics units, and the nursing professionals trained to work in these services, such as the first responders and intensivists reported a higher prevalence of occupational stress^(5,9,13,17,18,21,22,26,28).

It was observed that the work environment, characteristic of high and medium complexity, is considered stressful. In these environments, professionals suffer intense demands due to high complexity care services, which require greater loads of readiness and responsibility, leading to an emotional exhaustion in addition to the problems arising from the labor practice of caring⁽²¹⁾.

The stressors identified in nursing workers of high and medium complexity comprise high occupational stress, highlighting the changes in skeletal muscles pointed out by the nurses under study, thus corroborating the mental factors related to the occupational stress⁽²⁶⁾.

As predisposing factors of occupational stress, regardless of the service in which nurses worked, the studies have shown a dissatisfaction with the work practice; they report, for example, a workload exceeding 44 hours per week, and liable to reach up to 160 hours. In addition to that, the low remuneration of the workers and the practice in another employment bond in the nursing area, in order to complement the monthly income^(5,9-14,16-20,22-29).

It is a fact that nursing faces an exhausting work routine, a talent enhancement, an inflexible, complex and fragmented workload, and low salaries^(11,13,20). Other predisposing characteristics of occupational stress were the great demand, the pressure for accomplishment of the assistance with agility, the fear of losing the employment bond, the gradual increase in the workload, the work in three shifts in hospital settings, and working on duty^(10,14,17,19,22,25). Another factor is the demand for activities and responsibilities brought to the generalist nurses^(9,22,24,29).

On the occupational stresses of the nursing professional, it was also mentioned the high prevalence of privatizations of the hospital units, causing insecurities related to job instability, the decrease in salaries, and the precariousness of the environments^(15,17).

The reduction in the workforce and in the assistance inputs are another important points to highlight, because entrepreneurs want to maximize profits and forget about the worker's health and the quality of nursing care that the professionals provide to their patients^(23,27).

The nursing work is often considered rewarding to its executors, and also a source of pleasure and well-being. Assistance to the patient aimed at promoting the individuals' health is considered important in the area of care and to its executors. Even so, these facts can represent a great stressor to the worker, due to the non-valorization of the profession in its plenitude⁽⁵⁾.

The slowness and bureaucracy within the health services are difficult factors for nursing professionals. Often, the nurse remains attached to these obligations, leaving aside the patient care. This fact may delay the resolution of the health conditions and, consequently, decrease the quality of their care⁽¹⁷⁾. They also deal with conflicting functions, which generates instability within the multiprofessional team⁽²⁶⁾. There is also the accumulation of functions for nurses, considered a stressor since, in their daily practice, they get lost between the management and assistance activities⁽¹⁸⁾.

Occupational stress compromises the physical and mental status of the worker in the nursing area. Thus, they may present difficulties in understanding the facts that are being experienced and how these stressors are affecting their daily life⁽¹³⁾.

Some studies have shown that the inability in coping with the problems arising from the work, in the nursing area, and the high level of occupational stress can lead the professionals to the dependence on alcohol and other drugs and to the use of anxiolytics, in an active attempt to soften and remedy the suffering they are exposed to on a daily basis^(12,15). The consumption of alcohol and other drugs is worrying, since the excessive consumption, as presented in a research with 90 nursing workers, resulted in 16.6% of the workers presenting, within a 30-day interval, the regular and problematic use of alcohol, leading to addiction⁽¹⁵⁾.

CONCLUSION

It was evidenced that the factors triggering occupational stress are related to the proximity to human suffering, difficulty in sharing knowledge among the

members of the multidisciplinary team, high workload, work demand, pressure exerted by managers and patients, low remuneration, job instability, the work developed in high complexity and the accumulation of functions in the daily practice.

The occupational stress is inherent to the development of injuries or associated with pathologic conditions that determine the professional absenteeism. Among the most prevalent diseases are acute myocardial infarction, neurological mental disorders, psychiatric disorders, depressive syndromes, panic syndrome, hypertension, gastritis, somatic diseases, burnout syndrome, being the latter the most frequent. Occupational stress can also lead to dependence on alcohol and other drugs as well as the constant use of anxiolytics.

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