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Factors associated with occupational stress and health of workers in public administrative areas: an integrative review

Fatores associados ao estresse ocupacional e saúde de trabalhadores em área administrativa pública: revisão integrativa

Factores asociados al estrés laboral y a la salud de los trabajadores del área administrativa pública: revisión integradora

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This is an integrative review carried out in 2020, considering the periods from 2009 to 2019, in order to identify the evidence and productions on factors associated with the control of occupational stress in public servants in the administrative area. The following databases were listed: LILACS, MEDLINE (via PubMed), PsycINFO and SCIELO, with the descriptors: Administrative Personnel, Administrators, Administrator, Government Employees, Employee, Government, Official, Government, Officials, Government, Occupational Stress, Job Stress, Work-related Stress, Workplace Stress, Professional Stress, Job-related Stress, Adaptation, Psychological, Adaptation, Psychologic, Coping Behavior, Behavior, Coping Skills, Coping, Adaptive, Stress Management, Stress Control, combined with "and" or "or". From an initial search of 438 articles, seven productions were considered. Two categories emerged: *The impact of work management on occupational stress*; and *Chronic diseases and occupational stress*. Work management plays an important role in controlling occupational stress. It was observed that workers with chronic or musculoskeletal pain are more sensitive to the effects of stress. Humanization in companies and the need for practices and intervention studies that aim to minimize the sources of stress are shown to be necessary.
Descriptors: Occupational stress; Government employees; Administrative personnel; Public administration.

Esta é uma revisão integrativa realizada em 2020, considerando os períodos de 2009 a 2019, com objetivo de identificar as evidências e produções sobre os fatores associados ao controle do estresse ocupacional em servidores públicos em área administrativa. Elencou-se as bases de dados: LILACS, MEDLINE (via PubMed), PsycINFO e SCIELO, com os descritores: *Administrative Personnel, Administrators, Administrator, Government Employees, Employee, Government, Official, Government, Officials, Government, Occupational Stress, Job Stress, Work-related Stress, Workplace Stress, Professional Stress, Job-related Stress, Adaptation, Psychological, Adaptation, Psychologic, Coping Behavior, Behavior, Coping Skills, Coping, Adaptive, Stress Management, Stress Control*, em combinações *and* ou *or.* De uma busca inicial de 438 artigos foram considerados sete produções. Duas categorias foram construídas: *O impacto da gestão do trabalho sobre o estresse ocupacional;* e, *Doenças crônicas e estresse ocupacional*. A gestão do trabalho tem um papel importante no controle do estresse ocupacional. Observou-se que trabalhadores com dor crônica ou osteomuscular são mais sensíveis aos efeitos do estresse. Mostra-se necessário, a humanização nas empresas e a necessidade de práticas e estudos de intervenção que visem minimizar as fontes causadoras de estresse.
Descritores: Estresse ocupacional; Empregados do governo; Pessoal administrativo; Administração pública.

Esta es una revisión integradora realizada en 2020, considerando los periodos de 2009 a 2019, con el objetivo de identificar las evidencias y producciones sobre los factores asociados al control del estrés laboral en servidores públicos del área administrativa. Se utilizaron las siguientes bases de datos: LILACS, MEDLINE (vía PubMed), PsycINFO y SCIELO, con los descriptores: *Administrative Personnel, Administrators, Administrator, Government Employees, Employee, Government, Official, Government, Officials, Government, Occupational Stress, Job Stress, Work-related Stress, Workplace Stress, Professional Stress, Job-related Stress, Adaptation, Psychological, Adaptation, Psychologic, Coping Behavior, Behavior, Coping Skills, Coping, Adaptive, Stress Management, Stress Control*, en combinaciones *and* u *or.* De una búsqueda inicial de 438 artículos, se consideraron siete producciones. Se construyeron dos categorías: *El impacto de la gestión del trabajo en el estrés laboral;* y *Enfermedades crónicas y estrés laboral.* La gestión del trabajo desempeña un papel importante en el control del estrés laboral. Se ha observado que los trabajadores con dolores crónicos o musculoesqueléticos son más sensibles a los efectos del estrés. La humanización en las empresas y la necesidad de prácticas y estudios de intervención dirigidos a minimizar las fuentes que provocan el estrés se muestran como necesarias.
Descriptores: Estrés laboral; Empleados de gobierno; Personal administrativo; Administración pública.

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INTRODUCTION

Work takes up a large part of an individual's time, and is not always seen as a pleasant activity[1]. The world of work, associated with globalization, technological innovation, professional competition and maintenance of a high level of productivity, has given rise to a generation of psychically ill individuals[1-3].

Workers experience issues such as solving problems permeated with the overload of activities, inadequate organization and structures of companies in their work activities, which has hampered reflection or action on their own health and the well-being of the community. Occupational stress generates physical and emotional exhaustion in the face of work demands[4], as well as harming the worker in coping with work demands and contributing to illness[5].

Work environment stress is considered a chronic and recurrent disease, which can cause work disability and early retirement, in addition to the risk of suicide. It refers to a set of psychological disturbances or psychological distress due to the work experience, related to the organic vulnerability of each individual and the inadequate response to stressful situations[6].

Public servants exposed to stress at work, as in the case of the administrative area, face psychosocial problems such as overload of functions, negative interpersonal relationships, precarious working conditions, which favor psychological distress[7]. Occupational stress, provided by the way work is organized, without time planning and social support, is associated with a lack of healthy eating habits and physical inactivity, interfering with the individual's propensity to metabolic syndrome, cardiovascular risks, anxiety, fatigue and burnout, in addition to musculoskeletal pain[8-10].

In administrative and public administration positions, the demand for new standards of management plans and technological implementation have increased the level of emotional tension in the work of public servants, who need to adapt to new skills and abilities. Also, the constant exchange of functions and department changes has been a source of stress for these professionals[9].

It has been observed that studies involving the theme of occupational stress are more related to causes, prevalence and treatment[2,6,11,12], and not to issues that control or minimize its occurrence. Therefore, this work seeks to identify control factors as a management tool. It is necessary to understand the relationships in the work environment and their repercussions, and perceive the suffering, anguish and illness in the work world, therefore, to articulate worker's health and mental health[13].

The identification of recommendations or interventions on the control of occupational stress of public servants in administrative areas can contribute to the direction of proposals that help to minimize worker stress, contributing to the reduction of negative psychological symptoms and to the construction of strategies for coping with stressors. Thus, this study aims to identify the evidence and productions on factors associated with the control of occupational stress in public servants in the administrative area.

METHODS

It is an integrative review that is a method that allows critical knowledge for practice and also the foundation of conduct and decision-making[14]. The steps proposed for the construction of the integrative review were followed[14-17]: identification of the theme and elaboration of the guiding question of the research; search for articles in scientific literature and establishment of criteria for inclusion and exclusion of studies (sample selection); data collection (definition of information to be extracted from selected articles); critical analysis of the studies included in the review; analysis and interpretation of results and presentation of the review.

Data collection was carried out between January and March 2020. The selection of articles included in the review was independently performed by two reviewers. The theme of

occupational stress among public servants in the administrative area (administrative position) was defined.

For the guiding question, the PICO strategy was used according to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) recommendations[18,19], which refers to an acronym in English that means "*P*" patient or population, "*I*" intervention or exposure, "*C*" comparison or control and "*O*" outcome or outcomes. In this study, the "*CO*" meaning the context of the control outcomes are together. Thus, it was considered as "*P*" public servants in the administrative area (administrative position), "*I*" exposure to occupational stress, "*CO*" the evidence of the context on the control factors of occupational stress in public servants. The research question was: "*What is the evidence in the literature about factors associated with the control of occupational stress in public servants in the administrative area?*"

Articles published between 2009 and 2019, developed in Brazil and internationally, available electronically in full and whose titles and abstracts referred to the theme exclusively, in Portuguese, English and Spanish, and whose population were public servants, were included. Duplicate articles were excluded (repeating ones being excluded), editorials, opinion and review articles, letters, comments, notes, theses, dissertations and manuals[14,15].

After consulting the *Descritores em Ciências da Saúde* (DeCS) and the United State National Library of Medicine (MeSH/PubMed), the descriptors related to the theme and the corresponding keywords (synonyms), as well as terms involved with the theme were selected.

For the search strategies, the crossings were made using the selected terms combining the OR and AND Boolean methods according to the specificity of each database: "P" - *Population - "Administrative Personnel" OR "Administrators" OR "Administrator" AND "Government Employees" OR "Employee, Government" OR "Official, Government" OR "Officials, Government".* "I" *- Exposure or Intervention - "Occupational Stress" OR "Job Stress" OR "Work-related Stress" OR "Workplace Stress" OR "Professional Stress" OR "Job-related Stress". "*CO*" – context evidence - "Adaptation, Psychological" OR "Adaptation, Psychologic OR Coping Behavior OR Behavior, Coping OR Skills, Coping OR Behavior, Adaptive AND "Stress Management" OR "Stress Control".*

The selected databases were: *Literatura Latino-Americana e do Caribe em Ciências da Saúde* (LILACS), Medical Literature Analysis and Retrieval System Online (MEDLINE) via the US National Library of Medicine (PubMed), in Psychology Information – PsycINFO (interface with the CAPES portal), and the Scientific Electronic Library Online (SCIELO).

To extract information from the selected studies, the items proposed by an instrument proposed by Ursi, Mendes et al[14,15] were followed, with the following data: name of the original article, methodological characteristics, methodological accuracy, measured interventions and results.

The articles were critically evaluated regarding the validation of the studies to be used for the review. For this, the standardized instrument Critical Appraisal Skills Program (CASP)[19] was used, which is an auxiliary checklist in the critical analysis of quantitative and qualitative studies, as to accuracy and credibility: clear objective; methodological design appropriate to the objectives; methodological procedures; proper sample selection; described data collection; relationship between researcher and researched; Ethical aspects; substantiated data analysis; results presented and discussed; relevance of the search.

The type and strength of evidence of the articles was also evaluated[20]. To classify the hierarchy of research evidence, an international consensus on categorization from the Agency for Healthcare Research and Quality (AHRQ) of the United States of America was used. Thus, the evidence is classified into six levels: *level 1* (Systematic review with or without meta-analysis); *level 2* (randomized clinical trial study design); *level 3* (and study with quasi-experimental design as a study without randomization, time series or case-control); *level 4* (study as descriptive correlational and qualitative research or quantitative case studies); *level 5* (case report or data obtained systematically, of verifiable quality or program evaluation data); *level 6* (expert opinion)[20].

In turn, the strength of evidence is classified into five levels: *level 1*, strong evidence (systematic review of multiple well-designed randomized controlled studies); *level 2*, strong evidence (randomized controlled study of appropriate design); *level 3* (evidence from well-designed studies without randomization, cohort, time series or case-control); *level 4* (non-experimental, quantitative, qualitative studies); and *level 5* (expert opinions)[20].

For the analysis and subsequent synthesis of articles that met the inclusion criteria and for the formation of a synoptic picture, the following was used: article title; authors, year and country; study method; results; recommendations/conclusions[15]. This step aimed to gather and synthesize the available evidence, as well as categorization based on content analysis, in the thematic modality[21], in addition to discussion and conclusion[14].

RESULTS

Initially, 438 articles were identified. In the LILACS database, 07 articles were identified. When reading the titles, 02 articles were selected and, after reading the abstracts, none of the articles contemplated the objective of the study, being excluded. In the MEDLINE database (via PubMed), 400 articles were identified. By reading the titles, 121 articles were selected, but 30 were duplicated and/or repeated. After reading the abstracts, 18 studies were selected for full reading. Twelve articles were excluded for not meeting the study inclusion criteria, with 06 articles selected for the study.

In the PsycINFO database, 31 articles were identified. After reading the titles, 15 were left to evaluate the abstracts, with 03 articles being selected for full reading, but 02 did not meet the study objectives, which resulted in 01 article included. In the SCIELO database, no articles were identified. Therefore, 7 articles were included in this integrative review.

Figure 1 shows the diagram of the searches, as recommended by the PRISMA[18] group regarding the selected studies.

Description of studies

Seven articles from different countries were included (Chart 1), Brazil had two studies; the other countries had one study each. Of the included studies, four were cross-sectional, one was an experimental study, one was a quasi-experimental study, and one was a longitudinal study.

The articles were published in Brazil: Revista de Saúde Pública and Revista Latinoamericana de Enfermagem, from other countries: BMJ Open, Int. J. Environ. Res. Public Health, Management Decision, Work, Age and Ageing, Psychology.

The year of publication ranged from 2012 to 2018 (Chart 1). As for the type and strength of evidence for each design, the following were obtained: a level 2 study considered to have strong evidence (randomized controlled study, experimental), a level 3 study (study without randomization - quasi-experimental) and five level studies of evidence 4 (cross-sectional and longitudinal studies).

By the CASP[19] instrument, articles with a quantitative (cross-sectional) approach received a score above 6 points, which indicates good methodological quality and reduction of bias. Only one study had a strong level of evidence for the scientific community, but all with methodological quality. Table 1 presents the characterization of the research title, authors, year, country, study method, results and recommendations/conclusions.

Figure 1 - Diagram, according to the PRISMA[18] group, referring to the stages of study selection. Uberaba, Brazil, 2020.

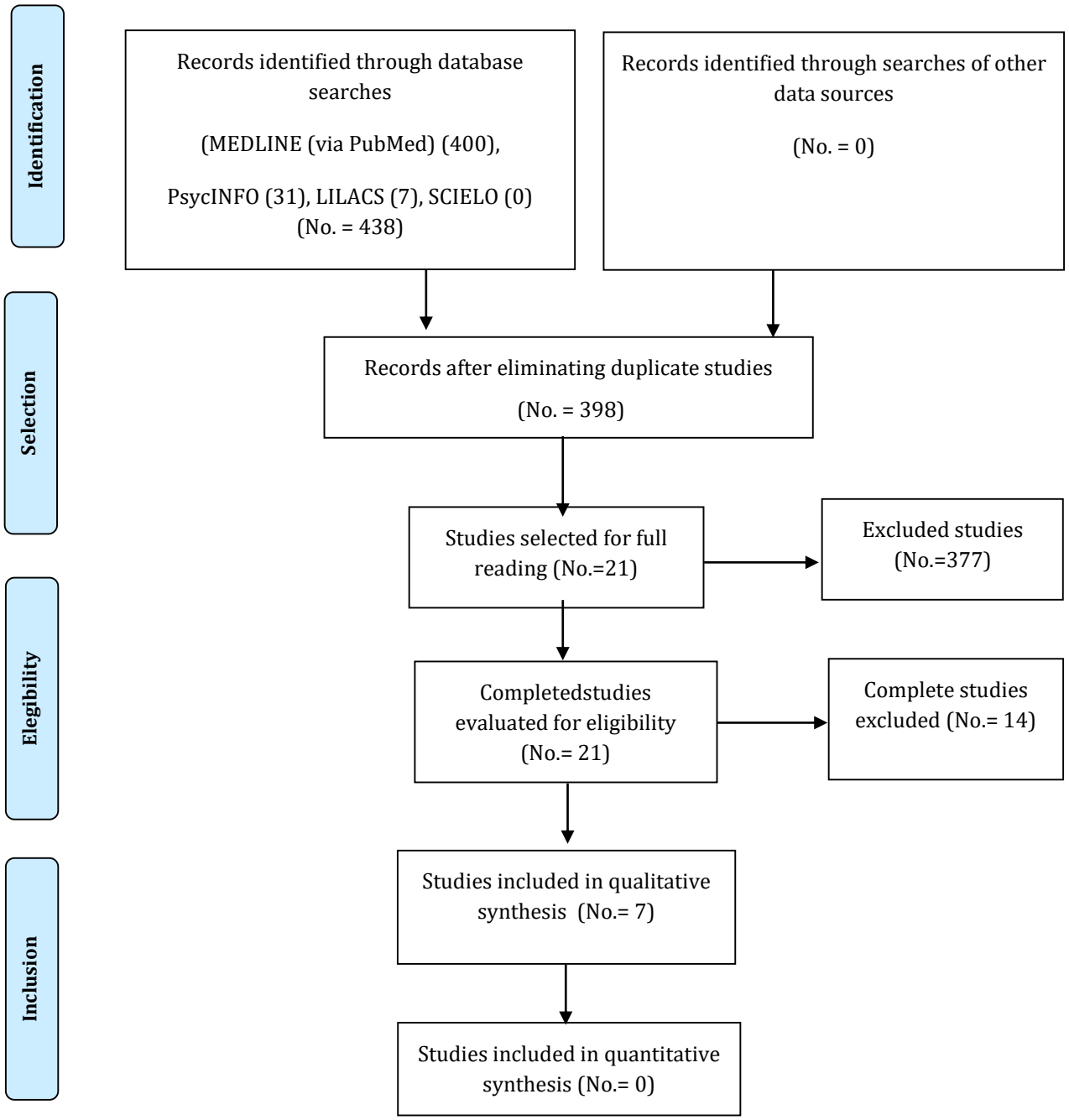

Chart 1. Synthesis of articles included in the integrative review, Uberaba, MG, Brazil, 2020.

Title	Authors/ Year/ Country	Study methods	Results	Recomendations/ Conclusions
1. Stressful working conditions and poor self-rated health among financial services employees	Silva LS, Barreto SM[22]. 2012. Brazil.	A cross-sectional study with a sample of 2,054 employees of a government bank. A self-administered questionnaire was used covering five areas of interest: sociodemographic, behavioral, health, psychosocial and work-related factors.	Exposure to high demand and low environmental control at work was associated with poor health self-assessment. Employees with high effort-reward imbalance and overcommitment also reported low self-rated health.	Exposure to adverse psychosocial factors at work, assessed by the effort-reward imbalance and demand-control models, is independently associated with worse self-rated health among the studied workers..
2. The Relationship of Job Satisfaction, Job Stress, Mental Health of Government and Non-Government Employees of Bangladesh	Nahar L, Hossain A, Rahman A, Bairagi A[23]. 2013. Bangladesh	Cross-sectional study. The Bengali Version of Job Satisfaction Scale, Job Stress Questionnaire, Mental Health Questionnaire (Gl-IQ-12) was used.	50 government employees and 50 non-government employees participated. It was found that non-governmental employees feel more stress at work than public employees, mainly because of job security. Men were more satisfied.	Job satisfaction, job stress and mental health are important determinants of employee health and well-being.
3. Efeitos da ginástica laboral compensatória na redução do estresse ocupacional e dor osteomuscular (Effects of compensatory workplace gymnastics in reducing occupational stress and musculoskeletal pain)	Freitas-Swerts, FCT; Robazzi, MLCC[24]. 2014. Brazil.	Quasi-experimental design study, with quantitative data analysis. Use of Work Stress Scale (WSS) and Corlett Diagram (CD). The intervention was workplace gymnastics twice a week, lasting 15 minutes each, over a period of 10 weeks.	30 public servants participated. The presence of occupational stress in the evaluated workers was not significant. There was a statistically significant pain reduction in neck, cervical, upper, middle and lower back, right thigh, left leg, right ankle and feet.	Workplace gymnastics promoted a significant reduction in back pain; however, it did not significantly reduce occupational stress levels.
4. Job strain in the public sector and hospital in-patient care use in old age: a 28-year prospective follow-up.	Von Bonsdorff MB, Von Bonsdorff H, Kulmala J, TörmäkangaT, Seitsamo J, Leino-Arjas P, et al.[25]. 2014. Finland.	The 28-year longitudinal study included 5,625 Finnish public sector workers aged 44 to 58 years. They answered a postal questionnaire with information about stress at work, physical and mental health.	High pressure on physical work in middle age increased the risk of hospital care in old age.	Exposure to heightened mental stress and a lot of physical exertion at work while in middle age can put employees on a higher level of mental stress and hospitalizations for health care.
5. Green exercise as a workplace intervention to reduce job stress. Results from a pilot study.	Calogiuri G, Evensen K, Weydahl A, Andersson, K, Patil G, Ihlebæk C, et al. [26]. 2015. Norway.	A randomized controlled clinical trial. Fourteen county office workers (7 women and 7 men, 49 ± 8 years) volunteered in an exercise-based workplace intervention. One group is outdoors, in a green/natural area and the other is in an indoor exercise environment.	Compared with the exercise group inside the company, the nature group (outside location) reported greater environmental potential for restoration and positive affect.	Outdoor exercise in the workplace can be a profitable way to manage stress and induce restoration and positive affection among employees.
6. Engaging public servants: Public service motivation, work engagement and work-related stress	Simone S, Cicotto G, Pinna R, Giustiniano L[27]. 2016. Italy.	Cross-sectional study and qualitative study. The instrument Management Standards Indicator Tool was used; Brief Overall Job Satisfaction Measure II. And focus groups.	137 public inspectors participated in the cross-sectional study and 61 public inspectors in the qualitative study, mostly women. It was seen that inspectors linked their positions with punishment, consulting and training. They perceive themselves with no salary increase, no recognition, poor relationships with colleagues and no training. The most satisfied are the most involved with the work.	Managers must be prepared to listen to employees, identifying risks of stress at work in advance. They must ask for support and train emotional control strategies so that there is engagement and professional satisfaction.

7. Effect of Job Strain on Job Burnout, Mental Fatigue and Chronic Diseases among Civil Servants in the Xinjiang Uygur Autonomous Region of China.	Guan S, Xiaerfuding X, Ning L, Lian Y, Jiang Y, Liu J, Ng TB[28]. 2017. China.	A cross-sectional study. The Revised Scale in the Occupational Stress Inventory (OSI-R) was used; Maslach Burnout Inventory (MBI) questionnaire; the Multidimensional Fatigue Inventory (MFI-20) and China Occupational Classification.	5,000 civil servants participated. Of these 33.8% were affected by high and moderate stress at work. Public employees with a high level of stress at work exhibited higher rates of burnout, mental fatigue scores and incidence of chronic illness.	The greater the degree of stress at work, the greater the incidence of chronic illnesses they had. The effect of work stress on burnout, mental fatigue and chronic illness among civil servants was considered to be of concern in China.

The articles included allowed them to be grouped into two categories by content similarity: *The impact of work management on occupational stress*; and *Chronic diseases and occupational stress*. (Table 2).

Chart 2. Categories and articles by content similarity. Uberaba, MG, Brazil, 2020.

Categories	Article of articles
The impact of work management on occupational stress	1. Stressful working conditions and poor self-rated health among financial services employees 2. The Relationship of Job Satisfaction, Job Stress, Mental Health of Government and Non-Government Employees of Bangladesh 5. Green exercise as a workplace intervention to reduce job stress. Results from a pilot study 6. Engaging public servants: Public service motivation, work engagement and work-related stress
Chronic diseases and occupational stress	3. Efeitos da ginástica laboral compensatória na redução do estresse ocupacional e dor osteomuscular 4. Job strain in the public sector and hospital in-patient care use in old age: a 28-year prospective follow-up 7. Effect of Job Strain on Job Burnout, Mental Fatigue and Chronic Diseases among Civil Servants in the Xinjiang Uygur Autonomous Region of China

DISCUSSION

Occupational stress can contribute to the worker's psychological distress and incapacity for work. In the civil service in the administrative area, it was evidenced that the role of the manager in the organization of work is fundamental. The manager or employer, when managing their own stress and perceiving it in their team individually and collectively, helps to control occupational stress. In addition, satisfaction, preparation to listen to employees and identification of prior risks are necessary for this process.

Social support from employers and co-workers was seen as positive in organizations, in addition to considering individual factors of organic vulnerability to work stressors, and different forms of adaptation.

The impact of work management on occupational stress

In work organizations, the role of the manager is fundamental in the general assessment, in interpersonal relationships and in the perception of the need for in-service training. In a survey conducted with 2535 government employees in Japan, supervisor and peer support was considered a protective factor against absenteeism among men and women. High tension at work and low support from colleagues and supervisor had a negative effect[29].

The management, when centered on work control as a possible countermeasure to presenteeism, encourages the support of co-workers, as well as favoring non-occurrence of absenteeism[29]. Managers are responsible for being prepared to listen to employees, identifying risks of stress at work. They should also ask for support and train emotional control strategies so that there is engagement and professional satisfaction[27]. Workers with low levels of self-efficacy for work and high levels of intrinsic motivation in work activities may be less susceptible to the effects of occupational stress[30].

However, leaders are more tired, concerned with management, with their work situation and pressured by companies. For this reason, in the public sector it is important to develop

prevention and guidance strategies in the workplace, which combine management for the well-being f both for individuals at the organizational level (employees in general) and for leaders (managers)[31].

The manager's satisfaction or dissatisfaction directly impacts the work process of organizations. The manager's emotional response is associated with individual and collective tensions. The positive factors are related to cooperation and good interpersonal relationships, while the negative management factors range from lack of manager training, overload of responsibility, lack of technical or maintenance support, competitions at work, which has generated loads psychic and stress[32].

Exposure to adverse psychosocial factors at work, assessed by the effort-reward imbalance and demand-control models, is independently associated with worse self-rated health among workers[22]. Adequate organization and structure provide satisfaction and reduce the incidence of occupational stress[11]. Job satisfaction, job stress and mental health are important determinants of employee health and well-being[23].

In the Malaysia study, 519 public sector employees were assessed for levels of emotional work and emotional exhaustion. From the findings, the employees' personality factors drive their affectivity, emotional work, emotional exhaustion, behavior and production at work. The study reveals that the personality traits of employees interfere in their behavior and lead to their affectivity, emotional work and exhaustion[33]. The ability to cope and adapt to stressful situations refers to the organic vulnerability of each individual[6].

The introduction of wellness activities in the workplace can be a means to improve the high levels of occupational stress among workers[34]. Health promotion at work is effective when it involves leisure activities linked to socialization, such as physical activity and healthy eating. These promote physical and psychological well-being[11]. Exercising outdoors, that is, outside the company's physical structure, can be an adequate way to manage stress and induce satisfaction among employees[26].

Social support, which refers to the support of colleagues and supervisors and the condition of safety at work[35], is a positive strategy in the relationship between professionals and helps to reduce the strain and risks to the worker's health. The investment in interdisciplinary programs for support and continuous support to servers with low social support and emotional maladjustment articulates the harmonious interaction between employees, as well as favors the capacity for work activities and the individual's well-being[36].

Occupational stress occurs collectively and is associated with factors such as role ambiguity, overload and lack of social support[35]. By managing their own stress, the employer helps to reduce organizational stressors and consequently favors the quality of life at work of employees[6].

Chronic diseases and occupational stress

The degree of stress at work is related to the incidence of chronic diseases in workers. The effect of work stress on exhaustion, mental fatigue and chronic diseases was considered relevant in a study carried out in China with 5,000 civil servants[28]. The stress perceived by the worker is related to the prevalence of musculoskeletal pain. Chronic pain can be related to age, gender, lifestyle, organizational factors and stress. Likewise, pain can be associated with psychosocial factors such as overload of functions, poor working conditions, negative interpersonal relationships and even greater risk of work disability[5].

A survey conducted in Brazil with 717 public employees of a federal university found that 85.6% of this population had musculoskeletal symptoms and a higher degree of perceived stress associated with the prevalence of musculoskeletal pain. Individuals with this type of pain are more sensitive to the psychic demands of work, with stress as a consequence[5].

Exposure to high mental tension and a lot of physical effort at work and midlife can put employees at a higher level of mental tension and generate future hospitalizations for health care[25]. Females were identified as more predisposed to stress and musculoskeletal diseases

reported in a study, where the position of supervisor did not meet the expectations of employees or work, in terms of planning and organization. On the other hand, supervisors with good skills in conflict reduction, work planning and participatory leadership had a lower presence of adverse health events; such as fatigue, psychosomatic factors and reported musculoskeletal pain[37].

Workplace gymnastics has promoted a significant reduction in back pain of employees who performed the activity; however, it did not significantly reduce occupational stress levels[24]. This requires a set of actions to control and promote health.

CONCLUSION

Studies have shown that the degree of occupational stress is related to the incidence of musculoskeletal pain and chronic diseases, and that individuals with pain are more sensitive to the negative effects of stress. Psychological suffering associated with a lot of physical effort at work and being in middle age increased the risk of future hospitalizations for health care, as well as perceived stress is related to the incidence of musculoskeletal pain, and chronic pain is associated with psychosocial factors and to occupational stress. Gymnastics at work was identified as favorable to the control of musculoskeletal pain.

There was a shortage of international and especially national productions on factors to control occupational stress in public servants in the administrative area. Especially studies with strong scientific evidence and intervention such as randomized clinical trials. Also, in the evidence from the studies surveyed, it was expected to identify strategies to minimize presenteeism and absenteeism associated with stress.

As a limitation of the study, it is noteworthy that it did not include databases specific to the administrative area and databases such as Web of Science, Embase, Redalyc and CINAHL. In future studies, such databases may be included and favor the scope of analysis of occupational stress in the civil service. There was also a need for more studies on the impact of the individual's organic vulnerability on exposure and adaptation to stressful sources at work. In turn, this study can contribute to the dissemination of the theme of occupational stress in public administration, and point out needs for sub-themes in the studied area.

Occupational stress is a current theme and its control favors the reduction of absences due to work disability related to psychological distress at work. The evidence from this study calls for humanization in companies and holistic care for employers and employees.

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