WORK STRESS IN HEALTH PROFESSIONALS: A SYSTEMATIC REVIEW

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ABSTRACT

Purpose: This study aimed to analyze the importance of work stress in health professionals, in publications from 2019 to 2022.

Methods: The method used was a systematic review with an analysis of empirical data on a specific topic. To obtain the information, databases Scopus, Direct, EBSCO, and the PRISMA strategy were reviewed, preselecting 313 open access articles, 300 studies were not included because they were not original or didn’t have complete information, remaining as a sample 13 original articles.

Results and Conclusion: The results show that the highest percentage of studies on work stress fall on nurses and doctors, due to coexistence with suffering and death, high patient demand, long work shifts, among other reasons. It is concluded that work stress can have a negative impact on the physical and mental well-being of health professionals, as well as on their work performance.

Research implications: Work stress is a physical and emotional reaction of the worker to perceived demands and pressures that are not adapted to their knowledge and abilities to face a certain situation.

Originality/value: From this perspective, the importance of those most relevant aspects is analyzed and of providing a small advance in the treatment of people within organizations, which contributes to the improvement of their competitiveness and allows a greater degree of development of the organizations.

Keywords: Stress, Work stress, Professionals, Health.

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Objetivo: Desenvolver materiais cimentícios, concretos, com a incorporação de resíduos de casca de coco (CFW) 

Métodos: O método utilizado foi uma revisão sistemática com análise de dados empíricos sobre um tema específico. Para obtenção das informações foram revisadas as bases de dados Scopus, Direct, EBSCO e a estratégia PRISMA, pré-selecionando 313 artigos de acesso aberto, 300 estudos não foram incluídos por não serem originais ou não possuírem informações completas, permanecendo como amostra 13 artigos originais.

Resultados e Conclusão: Os resultados mostram que o maior percentual de estudos sobre estresse no trabalho recaem sobre enfermeiros e médicos, devido à convivência com sofrimento e morte, alta demanda de pacientes, longas jornadas de trabalho, entre outros motivos. Conclui-se que o stress laboral pode ter um impacto negativo no bem-estar físico e mental dos profissionais de saúde, bem como no seu desempenho laboral.

Implicações da pesquisa: O estresse no trabalho é uma reação física e emocional do trabalhador às demandas e pressões percebidas que não estão adaptadas aos seus conhecimentos e habilidades para enfrentar determinada situação.

Originalidade/valor: Nesta perspectiva, analisa-se a importância daqueles aspectos mais relevantes e de proporcionar um pequeno avanço no tratamento das pessoas dentro das organizações, o que contribui para a melhoria da sua competitividade e permite um maior grau de desenvolvimento das organizações.

Palavras-chave: Estresse, Estresse no Trabalho, Profissionais, Saúde.

1 INTRODUCTION

Currently, work well-being is a relevant issue for the care of physical and mental health in times of the Covid 19 pandemic. In this regard, the high-risk rate that health professionals have due to the contagion of patients, the lack of protocols, and unexpected rotations in their functions; generate attitudinal changes related to stress. In this sense, work stress is considered as a set of situations that trigger physical and mental consequences in health personnel, this in turn generates minimal stressful circumstances, and then becomes a major problem that affects health, as well as the quality of care of the professional.

At an international level, the World Health Organization (WHO, 2019) states that the existence of a negative work environment affects both the psychological and physical well-being of the members of an organization and influences the effective results according to the assigned tasks. For the International Labor Organization (ILO, 2016) since the 1960s, it has become clear that organizational and management practices influence the mental health of workers and that their impact varies depending on the organization. However, only recently, concern for the well-being of workers and not only for their productive capacity in organizations is producing changes in management practices and occupational health and safety.

In Costa Rica, Moreira et al. (2022) in their study indicate that depression, stress, and anxiety were the signs that were most perceived in health personnel who worked especially in the care of people with COVID-19. On the other hand, in Ecuador, Moncada et al. (2021), in their research mention that doctors show higher stress scores compared to nurses. In this regard,
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Restrepo (2020) states that the health workers who have the highest rate of work stress are young nurses compared to the rest of the health personnel. Aware of the vital role in the health sector with nurses in times of pandemic, interventions to promote mental well-being in health professionals exposed to Covid-19 must be considered immediately to train health professionals in mental help and crisis management as expressed by the authors (Abarca et al., 2021).

Stress is a symptomatology of the organism as an effect of a frequent dependence on tasks that require greater effort than normal, stress is the undetermined reaction that the human body has to any coercion that is demanded of it, it is the consequence of the link between a person and their environment. There is no consensus regarding the definition of stress, mainly because some authors take it as a cause and other effects. However, to have a clearer notion, other definitions of stress are analyzed. Work stress is that produced by the work environment, as the body's response to a state of excessive and permanent tension that lasts beyond one's own strength. That means what happens to the stressed person is that they are placed in living conditions that continually bring them to the brink of exhaustion, an accumulation of constant overexertion, strong emotional and intellectual tension, without time for anything. In this definition, stress is associated directly with the work environment, and is analyzed as a response of the body to adverse work situations, which in a greater proportion can become exhaustion (Gallego et al., 2017).

Among the situations that have been predominantly evident on social networks, is the stress experienced by nurses who care for patients with Covid-19, but little has been documented with scientific evidence. Acute stress arises from the demands and pressures of the recent past and the anticipated demands and pressures of the near future; when this type of stress continues for too long, it becomes draining. During the pandemic, anger, irritability, anxiety, fear, or depression have been documented, as well as muscle problems that include headache, back or jaw pain, which lead to elevated blood pressure and heart rate, sweating, dizziness, chest pain or difficulty breathing.

Health personnel suffer from emotional and interpersonal stressors related to work, also called Burnout Syndrome. The government of Peru - with Ministerial Resolution No. 180-2020-MINSA - published the technical guide to establish procedures for the care and self-care of the mental health of medical personnel, with the aim of contributing to reducing the impact on mental health in health personnel at the national level.

The psychosocial factor at work arises from the interaction of working conditions, experience and perception of the employee and has the possibility of positive and negative effects on the health and well-being of employees, special attention must be paid to the psychosocial risks at work (RTP), since it is found within the Peruvian context of labor legislation (Law No. 29783 on Safety and Health at Work). Evaluations are periodic and preventive strategies are applied to reduce their effect. RTP are not considered in the various types of Peruvian research, with their absence in public and private scientific articles, even without evidence in the discipline such as Occupational Health Psychology in university curricula, and their impact on work and work organizations is unknown (Mejía et al., 2019).

Regarding the theoretical bases, the beginning of the term stress was known as a tension that was used in the 17th century and only in the 18th century was it founded from a physical point of view, and it was Selye (1973), who used it in the health area and is currently a widely used term in these times (Vidal, 2019). In this regard, Navinés et al. (2021), conceptualizes work stress as the response that arises when pressures arise in the workplace in which their demands exceed their capacity for knowledge and skills to cope with said demands.

Given what was described above, the following question arises: What is the importance of work stress in health professionals according to the systematic review of articles published between 2019 and 2022?
This work is justified by virtue of the problems that most frequently arise in the behavior of human resources within organizations. This illness will hinder human relationships, emotional states, personal perceptions, and attitudes, becoming a habitual state or way of being, reasons that make its timely treatment necessary. Stress is a phenomenon that occurs when the demands of life are perceived as too difficult, which is why throughout this study we analyze how human resources have acquired great importance in the world of health professionals. Health, as a differentiating element in these institutions to achieve quality care (Zampier et al., 2022).

From this perspective, the importance of those most relevant aspects is analyzed and of providing a small advance in the treatment of people within organizations, which contributes to the improvement of their competitiveness and allows a greater degree of development of the organizations. People in carrying out their work activity. On the other hand, it is inevitable to experience some degree of stress in life and on appropriate occasions it is beneficial. However, too much stress is dangerous for general health since it is altered for a long time and impairs the functions of many body systems. In this sense, it is very important to address the mental health problems of health professionals by offering resources, such as free access to counseling sessions by the organizations in which they carry out their care work (Leal-Costa et al. 2021).

The objective of the present study is to analyze the importance of work stress in health professionals through a systematic review of publications from 2019 to 2022.

2 METHODS

2.1 Design

A systematic review methodology was used with an analysis of empirical data that responds to a specific topic. UMAN (2011) defines a systematic review as a review of the scientific literature under a planned and carefully executed process, with the purpose of analyzing previously published findings to answer a specific research question. Likewise, it is considered as a retrospective analysis of studies compiled in the literature on a topic that is considered interesting for a general or specialized public (Kings, 2020).

2.2 Study sample

The sample is made up of 13 original articles that represent the unit of analysis. To search and obtain the information, the Scopus Science Direct, EBSCO database and a methodology based on the PRISMA strategy have been considered, during the period between January 2019 and August 2022, with open access. Likewise, studies published in Spanish, English and Portuguese were considered, using the keywords “Work Stress”, “Health professionals” and “Occupational stress”. These descriptors were mixed in various ways at the time of the information search, to expand and collect all potentially relevant research for this review.

2.3 Search procedure

For the information collection procedure, a first reading of the title and summary of the articles related to the research topic was carried out, to then apply a detailed and complete reading of the study. In this sense and with the objective of applying the conceptual, methodological, and statistical criteria, 313 open access articles were preselected, of which 300 studies that were not original, did not refer to the topic and did not have complete information.
were purged; leaving us with a sample of 13 articles selected using the PRISMA methodological strategy (See figure 1)

![Figure 1. Schematic diagram of the selection procedure for the database](source: Own elaboration taken for the Prisma Model)

**2.4 Inclusion and exclusion criteria**

For this study, the following inclusion criteria were considered: a) Articles from the Scopus Science Direct database, EBSCO, with open access; b) Studies between January 2019 and August 2022; c) Studies described in English, Spanish and Portuguese languages; d) Original studies; e) Studies completely related to the topic addressed; f) Studies that show complete information for a general analysis. Likewise, the exclusion criteria were taken into account: a) Articles that do not belong to the Scopus Science Direct, EBSCO database, b) Studies not included between January 2019 and August 2022; c) Studies not described in English, Spanish and Portuguese languages; d) Studies that were not original; e) Studies not completely related to the topic addressed; f) Studies that did not have complete information for a general analysis.

Finally, to organize the information of the 13 selected articles, a database was created in the Excel program, in which the following elements were taken into consideration: Authors and year of publication, country and continent where the study was carried out, methodology of research, sample of the study, title of the research and additionally the bibliographic references of each selected article. (See table 1). Once the information was organized, a systematic analysis of each study was carried out.
<table>
<thead>
<tr>
<th>Authors and year</th>
<th>Country and continent</th>
<th>Methodology</th>
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<tr>
<td>(10) Ozdemsir, Ş. &amp; Kerse, G. (2020).</td>
<td>Turkey (Europe and Asia)</td>
<td>Descriptive, correlational</td>
<td>169 Doctors, nurses, others.</td>
<td>The effects of the process of covid-19 in health professionals: analysis of the relationships between optimism, work stress and levels of emotional exhaustion.</td>
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3 RESULTS

According to the analysis of work stress in health professionals, through a systematic review of articles published between January 2019 to August 2022 in the Scopus, Science Direct, EBSCO database. It was found that of the total of 313 preselected studies in the databases; 13 original studies respond to the topic or problem under study and with complete information; which make up the database according to the guidelines established in this research. The analysis of the results obtained is detailed below (Víctor, 2019).

The following graph shows a comparison of the production of articles by year and their respective study samples. As can be seen, of the 13 articles selected in the database, the largest number of studies of scientific production occurred in the year 2020 (N=5) and 2021 (N= 04). However, the smallest number is in the year 2022 (N=1) because the studies up to the current date were reviewed; followed by the year 2019 (N=3). On the other hand, the largest amount of the selected sample is evident in the year 2020 (N=942), followed by the year 2019 (N=693) and 2021 (N=361) in descending order, while the smallest amount is observed in 2022 (N=248). (See figure 1)

Figure 2. Comparison of production of articles by year and study sample.
Source: Own elaboration

The following graph shows that, of the total of 13 articles selected in this study (database): 10 (77%) studies corresponded to South American countries; 02 (15%) studies to Central America and 01 (8%) studies to Europe and Asia. observing that the highest percentage of studies belong to the South American continent. (See figure 2)

Source: Own elaboration.
The following graph shows that, of the total of 13 articles selected in this study (database): the largest number 07 (54%) of studies corresponded to nursing professionals; 03 (23%) studies medical professionals, nurses, and others; 02 (15%) of the studies were for medical professionals and 01 (8%) for medical professionals and nurses; showing that the highest percentage of studies was carried out with nurses. (See figure 3)

Regarding the topic addressed on work stress in health professionals, a relationship of work stress with other variables was found (study: 1, 2, 4, 8, 9, 11,12 and 13), which were analyzed through work commitment, family dynamics, practice environment, burnout, quality of life, anxiety, and fear. Likewise, studies related to the reduction of work stress (study: 3 and 5), analyzed through interventions and communication strategies. On the other hand, a study related to stress levels (study: 6), analyzed through classification of stressor risks. Finally, articles related to the effects of stress on health professionals (study: 7 and 10), analyzed for
coping problems in post-traumatic stress situations and optimism in reducing emotional exhaustion caused by COVID 19 (via of work stress)

4 DISCUSSION

The analysis of the systematic review of the present study indicates that the largest number of scientific productions with the largest number of selected samples on work stress in health professionals, is evident in the year 2020. These results coincide with the study of Leal-Costa et al., (2021), who report that since the first case of SARS-CoV-2 coronavirus was reported in Spain at the end of February 2020; more than 74,000 health professionals have been infected; Added to this high risk of contagion that this profile has is a greater workload, the change of units, the increase in the number of patients, the increase in protocols, and numerous changes in their personal life that make health personnel more prone, compared to the general population, to suffer more problems related to work stress as a result of this pandemic (Ferrer, 2023).

As for the continent with the highest percentage of studies on work stress in health professionals, the South American countries are found. These results coincide with a Colombian study by the author, Restrepo (2020), who states that the mental health risks faced by health professionals (cardiologists) are related to exposure to work stress to which they work. they face or because of their prolonged exposure. In this regard, in Ecuador, Aldáz et al. (2020), in their study state that health professionals present symptoms of acute post-traumatic stress as a direct impact when providing care to those infected with COVID-19; evidencing those participants in the severe stress group showed greater consumption of tobacco, alcohol and psychotropic drugs as a coping mechanism compared to other study groups.

In relation to the health professionals with the highest percentage of studies on work stress, there are nurses, followed by doctors. These results coincide with the study by Vidotti et al. (2019), who report that the work environment in hospital institutions exposes nursing professionals to occupational risks, especially psychosocial ones, since they are subject to a process psychologically intense work, due to living with suffering and death, high patient demand, shift work, conflicts in interpersonal relationships and low recognition as part of a perception of professional devaluation; These stress factors would trigger mental illness in many nursing workers, these being the main cause of absenteeism and work disability.

In this regard, Flores and Morales-Sánchez (2022) report that doctors, especially residents, are people subject to multiple work stressors, finding in their study high levels of perceived stress in doctors, unlike other comparative studies. In this sense, Navínés et al. (2021), state that in resident doctors a high workload with excessive working hours, hostile environments and poor conditions in the workplace are risk factors for the appearance of stress in these health professionals. However, Auserón et al. (2018), report that providing health professionals with skills that help them connect with others, be kinder to themselves, and observe reality in an even-handed way with a better perspective, can protect from work stress and reduce emotional fatigue.

Regarding the topics addressed on work stress and its relationship with other variables in health professionals, a deep analysis of the relationship with work commitment, family dynamics, practice environment, anxiety, fear, burnout, quality of life was found. Likewise, work is being done to reduce work stress through the application of interventions and communication strategies. Studies on stress levels are analyzed through the classification of socio-occupational risks and finally the effects of work stress are related to post-traumatic events and emotional exhaustion due to stressful situations. These results coincide with the study by Abarca et al. (2021), who conclude that by subjecting health personnel to situations of continuous stress, not only is the patient's health harmed due to the quality of care they receive,
but also the health professional is affected by occupational diseases caused by stress, including musculoskeletal problems, headaches, stomach pains, sleep disturbance, psychological difficulties, among others; but above all it affects their proper work performance. In this regard, Vásquez-Chang et al. (2021), report that in the face of this work overload, health professionals have taken the time to strengthen their interpersonal communication with the external public through clear and assertive messages in each of the strategies. communicative.

5 CONCLUSION

Health professionals much more frequently suffer from work stress, being observed in their behavior, emotions, perceptions, and attitudes within organizations regarding the quality care they provide to satisfy their healthcare work.

The study shows 13 original articles on work stress in different databases which through a process of interpretation and analysis, reflected that the highest percentage of professionals who evidenced work stress are nurses, followed by doctors, due to living with suffering and death, high patient demand, long shift work, conflicts in interpersonal relationships and low recognition as part of a perception of professional devaluation. Likewise, the object of study was related to other topics, the most important being articles (7 and 10) linked to the effects of stress with coping and optimism in the reduction of emotional exhaustion caused by stress in health professionals.

It is concluded that work stress can have a negative impact on the physical and mental well-being of health professionals, as well as on their work performance, therefore, it is important to identify, prevent and treat work stress to improve well-being and the work performance of health professionals.

In this regard, it is recommended to constantly evaluate and monitor health professionals, generating a good work environment that emotionally helps in personal satisfaction and their care work.

REFERENCES


Cantor-Cruz, F., McDouall-Lombana, J., Parra, A., Martin-Benito, L., Quesada, N., González-Giraldo, C., Rodríguez, M. L. C., Gutiérrez, A. M., Garzón-Lawton, M., Ronderos-Bernal, C.,


