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Stress in Nurses Working in Health Facilities during the COVID-19 Pandemic in North Lima

Estrés en Enfermeras que Trabajan en Establecimientos de Salud durante la Pandemia del COVID-19 en Lima Norte

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ABSTRACT

Introduction: the occupational stressing nursing professionals is one of the most common problems within their work environment, factors such as shortage of biosafety equipment, high patient demand and not having adequate communication between staff, causes stress to increase considerably interfering with care of quality in patients, therefore the research objective is to determine the stress in nurses working in health facilities during the COVID-19 pandemic in North Lima.

Methods: it is a quantitative, descriptive-transversal study with a population of 255 nurses who answered a questionnaire of sociodemographic data and the Nursing Stress Scale in its Spanish version.

Results: In the results it was observed that professionals who are on duty between 1 and 5 years, 22,4 % have low stress, 43,9 % medium stress and 33,6 % high stress.

Conclusions: In conclusion, strategies should be carried out to maintain the healthy mental health of nurses through counseling with professionals specialized in mental health.

Keywords: Stress; Occupational Stress; Nursing Professionals; Mental Health.

RESUMEN

Introducción: el estrés ocupacional que padecen los profesionales de enfermería es uno de los problemas más comunes dentro de su ámbito laboral, factores como la escasez de equipos de bioseguridad, la alta demanda de pacientes y el no tener una adecuada comunicación entre el personal, hace que el estrés aumente considerablemente interfiriendo con la atención de calidad en los pacientes, por lo tanto el objetivo de la investigación es determinar el estrés en enfermeras que laboran en establecimientos de salud durante la pandemia de COVID-19 en Lima Norte.

Métodos: es un estudio cuantitativo, descriptivo-transversal con una población de 255 enfermeras que respondieron un cuestionario de datos sociodemográficos y la Escala de Estrés de Enfermería en su versión en español.

Resultados: en los resultados se observó que los profesionales que están de guardia entre 1 y 5 años, el 22,4 % tiene estrés bajo, el 43,9 % estrés medio y el 33,6 % estrés alto.

Conclusiones: en conclusión, se deben llevar a cabo estrategias para mantener la salud mental saludable de las enfermeras a través de asesorías con profesionales especializados en salud mental.

Palabras clave: Estrés; Estrés Laboral; Profesionales de Enfermería; Salud Mental.

INTRODUCTION

Work stress is defined as a physical and mental condition that is, in most cases, caused by heavy or overworked workloads, long working hours, or unfavorable conditions in the workplace or organization.⁽¹⁾

According to the World Health Organization, Occupational Burnout Syndrome is "a result of chronic stress in the workplace that has not been successfully managed" and clarifies that "it refers specifically to phenomena in the work context and should not be applied to describe experiences in other areas of life".⁽²⁾ In turn, the International Labor Organization (ILO) defines "Stress as a physical and emotional response to wear and tear that is caused by perceived demands of a person and that the result is imposed by the capacity, resources and needs, which it possesses to face them".⁽³⁾

In this sense, the COVID-19 pandemic has shown that we have an unstable health system, as well as a shortage of nurses to face the situation from the front line of care.⁽⁴⁾ Many factors, such as inadequate personal protective equipment, lack of decent working conditions, work procedures in accordance with international standards and insufficient number of multidisciplinary and interdisciplinary teams, generate episodes of stress that hinder the practice of the nursing professional.⁽⁵⁾

Although currently, there is a diversity of studies on how the COVID-19 pandemic has generated a lot of stress for different health systems. This has engaged the workforce, particularly nurses. It is evident that of the health professionals, nurses are the ones who suffer from anxiety and stress for caring for and treating patients.⁽⁶⁾ Since work stress among nurses can affect their quality of life and, at the same time, the quality of care that is of particular importance, as they can provide more effective services when they have a better quality of life.^(7,8)

This global health emergency represents one of the greatest challenges for nursing professionals as members of the health team. The high transmissibility of COVID-19 and the absence of defined treatment for its control are aspects that affect the psychosocial well-being of nurses. As a result, negative emotions and thoughts can damage their mental health, affecting the performance of tasks related to people's health care, their situational management capacity and quality of care.⁽⁹⁾

A study in the United States of 3 957 661 nurses revealed that among the reasons why they left their job: 31,5 % reported stress as a reason. Where respondents who reported leaving or considering leaving their job due to burnout reported a stressful work environment (68,6 %) and inadequate staffing (63,0 %). Suggesting that burnout is a serious problem among American nurses who quit or are thinking about quitting. Health systems should focus on implementing known strategies to reduce burnout, including adequate nursing staffing and reduction of work shifts.⁽¹⁰⁾

A study conducted in Mexico to 126 nurses in the context of COVID-19, revealed that 81 % of the participants were female, mostly working the night shift, 58,7 % refused to work 12 hours in their day, 44,4 % have 7 or more patients in their custody, while 16 % claimed to have contracted COVID-19.⁽¹¹⁾ The level of stress that predominated was the medium level, showing that the main stressors were the workload, psychological aspects such as facing the death and suffering of their patients.⁽¹²⁾

In Europe; a study conducted in the city of Granada, Spain revealed that in the area of Intensive Care; The nurses presented work stress, where the causal factors are the lack of professionals, the noisy environment, the personality, the meticulousness or the lack of personnel. Concluding that it is necessary to implement intervention programs for them, which will help them cope with stress and therefore greatly improve the quality of care provided to patients.⁽¹³⁾ As in Australia where an incidence of stress and anxiety among nurses of 41,2 % was found.⁽¹⁴⁾

In Asia, a study conducted in the city of Tabriz, Iran; 115 nurses from two hospitals; It was evidenced that work-related stress has a negative effect on nurses' health-related quality of life that can overshadow care performance and reduce such behaviors in nurses, which may be one of the factors affecting patient outcome.⁽¹⁵⁾

In India, one study found nine factors responsible for occupational stress among nurses in the Indore region that are monetary and non-monetary assessment, capacity utilization, time pressure, organizational culture, conflicting demands, work climate, matching responsibilities, identification with the organization, and role expectation.⁽¹⁶⁾

A study conducted in various hospitals and departments specialized in infectious diseases in China where 1 536 nurses were obtained, where 88,2 % experienced an effort-reward imbalance demonstrating that work

stress correlates negatively with psychological resilience and that it is positively correlated with quality of life. This is an indirect effect of work-related stress on quality of life through psychological resilience, indicating that it is a partial mediating role of psychological resilience.⁽¹⁷⁾

In South America, a study conducted in Ecuador of 51 nurses in the city of Riobamba revealed that the prevalence of work stress was 84,51 %, where nursing staff suffered greater exposure to work stress. Demonstrating that the most exposed dimension was cohesion; identifying a considerable negative correlation between work stress and self-perception of health.⁽¹⁸⁾

In Peru, a study of 126 emergency service nurses from two public level III hospitals in Lima and Callao revealed that 39,1 % of nurses had some degree of anxiety, 24,6 % some degree of depression and 8,8 % some degree of stress. Where nurses who care for suspected COVID-19 patients in emergency services presented greater anxiety than depression and in few cases presented stress.⁽¹⁹⁾

Therefore, the objective of the research is to determine the stress in nurses working in health facilities during the COVID-19 pandemic in North Lima.

METHODS

Research type and Design

The research work is quantitatively with non-experimental descriptive-cross-sectional methodology.⁽²⁰⁾

Population

The population is made up of a total of 255 nursing professionals working in a health facility

Inclusion Criteria

- Nursing professionals who are working in the health facility for more than 1 year
- Nursing professionals who only work in a hospital environment
- Nursing professionals who voluntarily agree to participate.

Technique and Instrument

The data collection technique is the survey, providing sociodemographic aspects and the instrument "Nursing Stress Scale (NSS)" by Gray P. and Anderson J⁽²¹⁾; but for the research work it was used in its version validated in Spanish by Más R. and Escribá V.⁽²²⁾

The NSS instrument comprises 34 items divided into 3 dimensions (Physical Environment, Psychological Environment and Social Environment), in which it is valued with a Likert-type scale with 4 response options: "0 = Never", "1 = Sometimes", "2 = Frequently" and "3 = Very frequently", in which a total score of 0 to 102 points is obtained, Distributed in 3 low, medium and high levels, the higher the score, the higher the level of stress in nursing professionals.

Regarding its validation of the instrument, it was determined by the Kaiser-Mayer-Olkin sample adequacy obtaining a result of 0,950 (KMO > 0,6), while in Bartlett's sphericity test it obtained significant results (X^2 approx. = 6241,645; gl = 561; p = 0,000).

And finally for the reliability of the instrument, it was determined by Cronbach's Alpha, obtaining a result of 0,962 ($\alpha > 0,8$).

Place and Application of the Instrument

The application of the instrument was given through prior coordination with each of the nursing professionals to be participants in the study, in addition to providing them with knowledge about the study to be carried out.

This flowchart shows the strategies that the nursing professional can perform in the face of stressful situations in the workplace.

The coping that nursing professionals choose to perform is managed adaptively to work stress, since they constitute a personal resource of relevance, in which both individual and group clinically intervene. By considering factors that can be modified, through interventions that improve coping strategies, it will make it easier for nursing professionals to minimize the consequences because of work stress.

Although not all coping styles are for the improvement of the nursing professional, since some coping styles that are personal, not only allows the reduction of work stress, but allows the increase of it if it is not handled correctly.

Therefore, both hospital and community centers should promote all types of interventions and programs that allow the development or improvement of coping strategies that are adaptable in terms of work stress, and that nurses can cope with stressful situations in their work environment, to improve their routine clinical nursing practice.

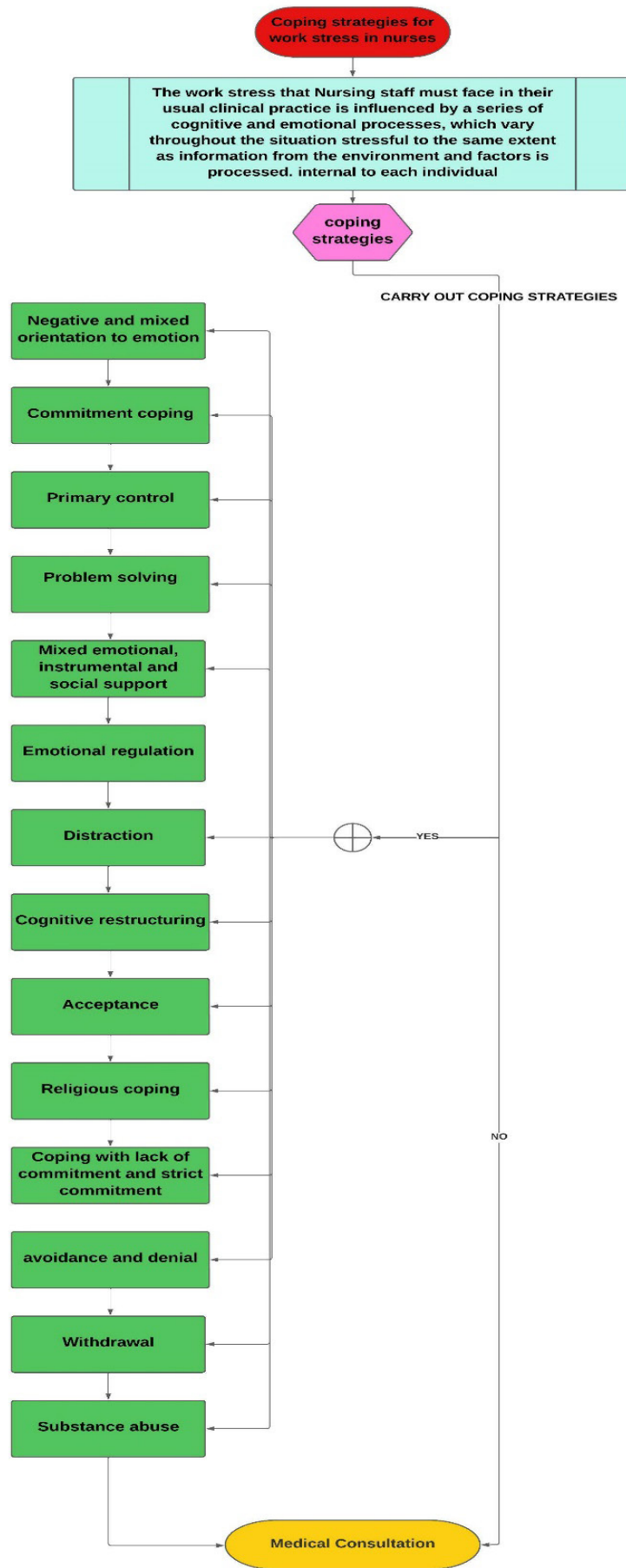


Figure 1. Flowchart on the coping strategies that nurses carry out in situations that generate work stress

RESULTS

In Figure 2, we can see that 23,9 % (n=61) of the participants have a low stress level, 54,5 % (n=139) have a medium stress level and 21,6 % (n=55) have a high stress level.

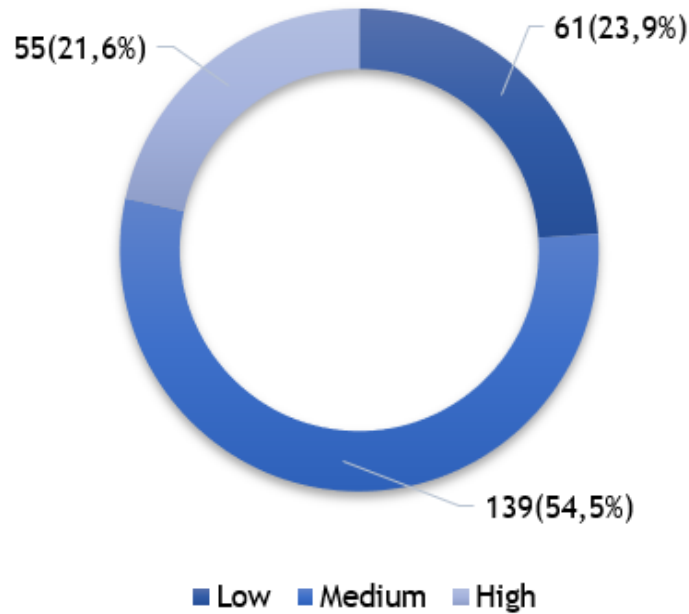


Figure 2. Stress in nurses working in health facilities during the COVID-19 pandemic in North Lima

In Figure 3, it can be observed that 19,2 % (n=49) of the participants have a low stress level with respect to the physical environment dimension, 55,7 % (n=142) have a medium stress level and 25,1 % (n=64) have a high stress level.

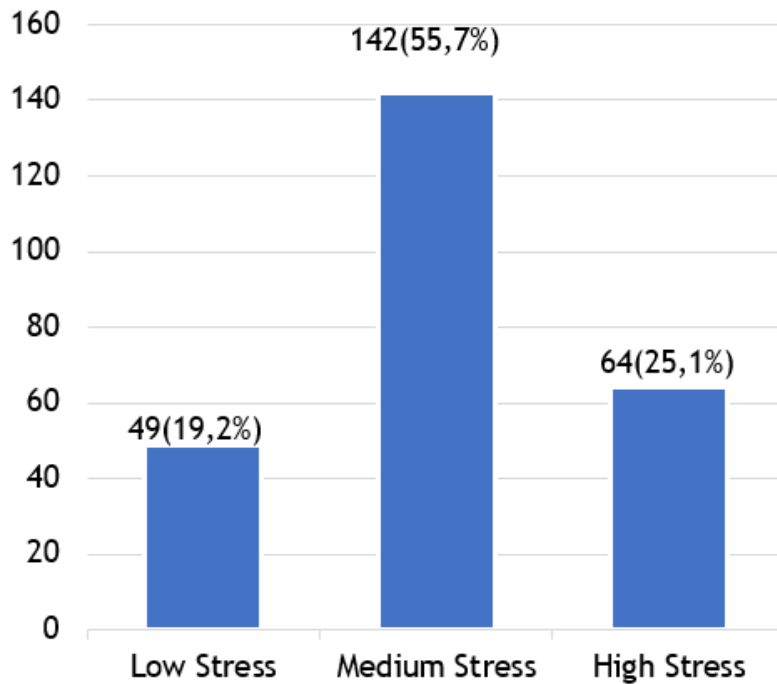


Figure 3. Stress in nurses in their physical environment dimension who work in health facilities during the COVID-19 pandemic in North Lima

In Figure 4, we can see that 28,6 % (n=73) of the participants have a low stress level with respect to their psychological environment dimension, 49 % (n=125) medium stress level and 22,4 % (n=57) high stress level.

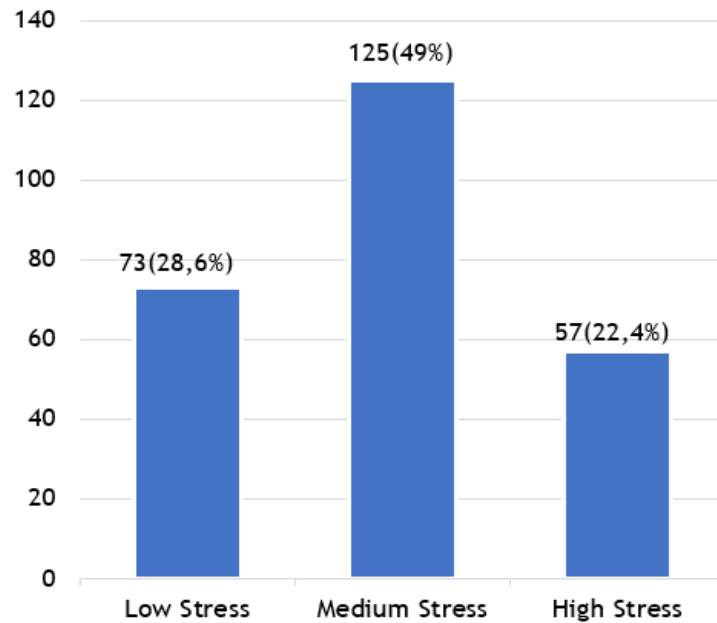


Figure 4. Stress in nurses in their psychological environment dimension working in health facilities during the COVID-19 pandemic in North Lima

In Figure 5, we can see that 38,1 % (n=97) of the participants have a low stress level with respect to their social environment dimension, 52,5 % (n=134) have a medium stress level and 9,4 % (n=24) have a high stress level.

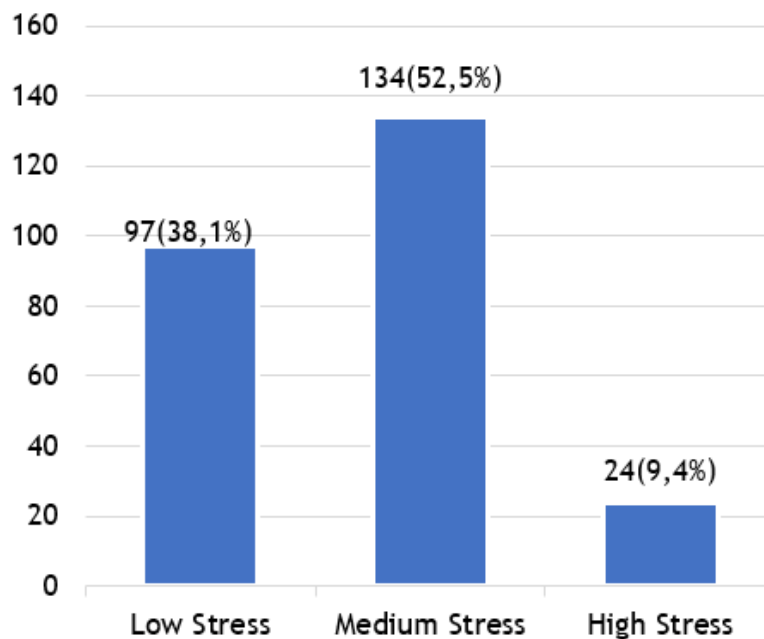


Figure 5. Stress in nurses in their social environment dimension working in health facilities during the COVID-19 pandemic in North Lima

In Figure 6, we can see that 22,4 % (n=24) of the participants who are in service from 1 to 5 years have a low level, 43,9 % (n=47) have a medium level and 33,6 % (n=36) have a high level, while participants who are in service from 6 to 10 years, 22,2 % (n=12) of the participants have a low stress level, 53,7 % (n=29) have a medium level and 24,1 % (n=13) have a high stress level, while participants who are in service from 11 to 15 years, 25 % (n=10) have a low stress level, 65 % (n=26) have a medium stress level and 10 % (n=4) have a high stress level, As for participants who are in service aged 16 to 20 years, 23,1 % (n=6) have a low stress level, 69,2 % (n=18) have a medium stress level and 7,7 % (n=2) have a high stress level; and as for participants who have been in service for more than 20 years, 32,1 % (n=9) have a low stress level and 67,9 % (n=19) have a medium

stress level.

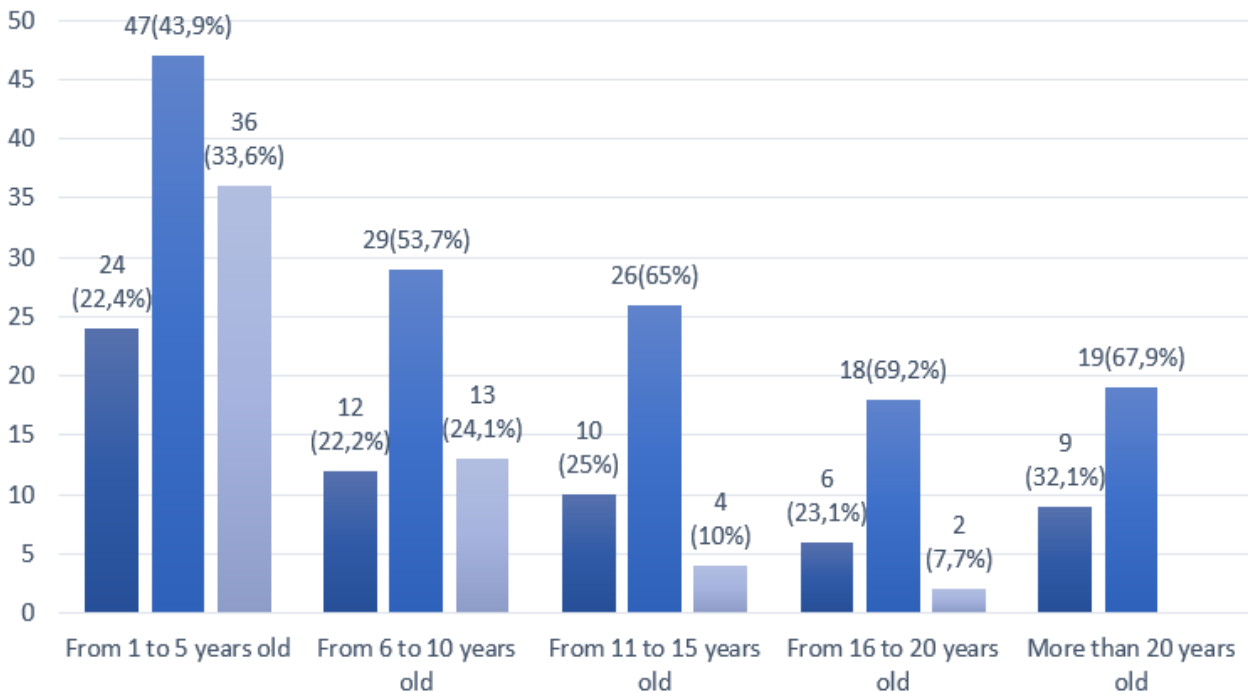


Figure 6. Stress in nurses in relation to their years of service working in health facilities during the COVID-19 pandemic in North Lima.

DISCUSSION

In the present research, it is given from the perspective of promotion and prevention of work stress in nursing professionals, given that stress is increasingly increasing, and therefore, coping strategies were developed to minimize stressful situations in the nursing professional.

In the results of the main variable work stress, it can be observed that health professionals have a medium level of work stress, this is because the mental health of nursing professionals was compromised in the COVID-19 pandemic, where factors of excess workload, high patient demand.⁽²³⁾ Extra shifts at work, lack of communication at work and shortage of human resources, raises stress rates, therefore the nursing professional tends to present work stress as a result, making them more vulnerable to any mental disorder.

In the results of its dimensions, we can observe that nursing professionals have average work stress in terms of dimensions, physical, psychological and social, this is because the nursing professional being compromised both their mental and physical well-being, causes factors such as exhaustion and work overload, indicate that they are mentally stressed around work. Since the work environment where you are working is stressful, since the pressure exerted at work, brings consequences in which the ability to adapt to the work environment is obstructed, and with it brings with it the increase in stress levels at work.⁽²⁴⁾

Regarding the results of work experience, we can observe that workers under 5 years of age tend to manifest more stress, given that being beginners in terms of the care of patients with COVID-19,⁽²⁵⁾ they have the vulnerability of presenting symptoms of stress, since they use advanced resources for care in a patient with COVID-19. And because they are not significantly targeted, the high demand for patients will be a major challenge for these workers, making them more susceptible to stress at work.

CONCLUSIONS

It is concluded that, strategies should be promoted that maintain the stable mental health of nursing professionals by providing counseling through professionals specialized in mental health.

It is concluded that strategies should be promoted to deal with any situation that generates stress within the work environment in nursing professionals.

It is concluded that educational talks should be held about stress and its methods to prevent it around the work environment of nursing professionals.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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