ORIGINAL ARTICLE

Use of antidepressants in the clinical nursing team: a prospective transversal observational study

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Abstract

Currently, with the perspective of becoming the second leading cause of disease in the world, depression is seen as a disease of modern society, affecting even health professionals such as nurses, nursing technicians, and nursing assistants. Based on this, this work aims to survey data on the use of antidepressants in the clinical nursing staff – nurses, technicians, and assistants who work at night at the ABHU. A questionnaire was designed to understand the reason for using antidepressants in the clinical nursing staff – nurses, technicians, and assistants. In addition, the questionnaire also aims to confirm hypotheses such as, whether the use of antidepressants by health professionals is related to the length of experience in the area, the use of antidepressants is related to stress, physical and emotional exhaustion, the length of treatment with antidepressants with a perception of improvement, it is related to the time of use, whether there is a relationship between the use of antidepressants and gender and whether the treatment with antidepressants is carried out with monitoring of professionals.

Keywords: Depression. Antidepressant. Nurses. Nursing technicians. Nursing assistants.

Introduction

The transition from a student from a technical or university course to a graduated individual requires changes in the cognitive and social levels. Taking responsibility and making big decisions can interfere with the psychological level of the newly graduated person. In the case of nurses, nursing technicians, and nursing assistants, there is pressure because the professional interfere in another person's life [1]. Health professionals such as nurses, nursing technicians, and nursing assistants are dedicated to promoting, maintaining, and restoring people's health, working in partnership with other professionals, physicians, nutritionists, and psychologists, for example. These professionals are essential in hospitals; the nurse collects data on the patient's health status and defines the conduct to be followed by nursing technicians and assistants. The clinical nursing staff is responsible for hygiene, food, medicine administration, and dressings [1].

All these tasks can be stressful. This makes it impossible for the individual to gather information necessary to understand cause-and-effect relationships. From there, illnesses such as depression can be triggered. Depression is a mood disorder with a change in the individual's perception, in which he sees his problems increased. It is seen as a disease of modern society. It by itself can be a serious pathology or just a symptom in a difficult situation [2]. The fourth leading cause of illness in the world in 2000 was depression, with the prospect of being the second largest in 2020. It is evaluated as one of the biggest public health problems and today affects 322 million people in the world. According to the latest estimates by the World Health Organization (WHO), "the number of cases of depression in the world increased by 18% between 2005 and 2015" [3].

Depression can result from drug use, a medical condition, or a stressful event, in addition to unknown

causes. Stress is one of the main environmental factors that predispose individuals to depression, and most cases of depression are preceded by stressful situations, especially those of psychosocial origin [4]. Depression caused by prolonged stress is due to the constant activation of the adrenal, causing it to reach its maximum level of production of noradrenaline, from which it becomes unable to satisfy the demand. However, the individual can go into acute depression due to exhaustion stress which soon releases cortisol [5].

Health professionals are not immune to stress-related illnesses or health risk behaviors and point out some statistics that reinforce these facts: nurses are 30 to 100 times more likely than the general population to become chemically dependent and present a high degree of exhaustion syndrome, compared to other professionals [6].

In a study with 123 respondents, 54 were nurses, of which 21% considered themselves stressed. This was the highest number among all other professionals interviewed. 34.44% of these professionals used tranquilizers or anxiolytics. And according to the study, 37.4% of professionals who use or have used antidepressants have 16 or more years of experience in the area. The nurses' work environment causes psychological and physical wear, as they deal with a lot of suffering, there are hours of work, and, after all, they deal with lives. This makes that, over the years working in this area, many professionals develop depression, for the simple fact of having this tiresome routine in a hospital environment for a long time [7].

The prevalence of depression is two to three times more frequent in women than in men, even considering studies carried out in different countries, communities, or patients seeking psychiatric services [8]. Currently, there are several medications that are used by the population with antidepressant and/or anxiolytic effects. The World Health Organization has been calling attention to this fact for some years, especially in developing countries. In Brazil, some studies were carried out in the 1990s, including a survey among students from the public school system identified that 5.8% of them had already used anxiolytics without a prescription [9].

Of the categories of psychoactive drugs, three are of great importance when it comes to sales control in pharmaceutical establishments: anxiolytics (benzodiazepines), antidepressants, and psychomotor stimulants [10]. The use of medications varies according to age, sex, health conditions, and other factors of a social, economic, or demographic nature. Consumption, according to therapeutic classes, changes over time and geography [11]. According to the Brazilian Health Technology Assessment Bulletin (BRATS), for any therapeutic effect of antidepressants to occur, a period of at least two weeks is needed. Furthermore, it further illustrates that to have a clinical response and reduce symptoms, continuous use of antidepressants for at least four weeks is necessary [12].

In the exercise of the profession, the worker of the clinical nursing staff has knowledge about psychoactive drugs, their effects, and, as a rule, they have easy access to psychoactive drugs. The facilitated access to which we refer is the availability to obtain a prescription from a doctor of your acquaintance, also through representatives of laboratories that distribute various types of psychotropic drugs in health institutions as a 'free sample'. Thus, the professional of the clinical nursing staff self-medicates and controls the amount of the drug according to their own criteria. However, self-medication without the monitoring of another professional can become abusive or indiscriminate, in addition to the risk of suffering the undesirable and even irreversible effects caused by the drug [13].

According to Fleck, in reviews of clinical studies of meta-analysis and randomized clinical trials, response rates to treatment with antidepressants vary between 50 to 65% in patients with the depressive disorder [8]. Considering the professionals who work at night at the ABHU, this work seeks to understand whether:

• The use of antidepressants by health professionals is related to the length of experience in the area.

• The use of antidepressants is related to stress, physical and emotional strain.

• The duration of treatment with antidepressants with a perception of improvement is related to the time of use.

• There is a relationship between the use of antidepressants and gender.

• Treatment with antidepressants is carried out with professional supervision.

Methods

Study Design

This study followed a prospective observational and cross-sectional model, following the rules of clinical research of the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology), available at: https://www.strobe-statement.org/.

Participants

The study population will be the clinical nursing

staff - male and female assistants, technicians, and nurses who work at night at the Hospital Beneficente da Unimar (ABHU).

Data Collect

An interview was carried out using a questionnaire, containing questions such as age, gender, length of experience, whether you have depression and are being treated with antidepressants, and with which professional does the follow-up. The interview will be conducted by five previously trained medical students.

Settings

The ABHU in Marília has 165 beds spread over three floors and two blocks, with 27 beds in wing A on the first floor, 20 beds in wing B on the first floor, 28 beds in wing C on the first floor. In addition, it has an adult ICU with 20 beds and a neonatal ICU with 10 beds. The ABHU Emergency Room has 10 beds. The second floor has 20 beds and the third, organized into two wings A and B with 30 beds in total. In addition, the ABHU provides services such as maternity, clinical and surgical admissions, also offers imaging and laboratory tests, specialized medical clinic (AME) among others.

Statistical analysis

Analysis was performed using descriptive statistics and correlation analysis. Data will be typed and presented in graphs or tables, with the support of Excel® and Minitab® 17.1.0 software.

Ethical aspects

The research project was inserted in Plataforma Brasil and submitted to the Research Ethics Committee of the University of Marília and was approved with the opinion number: 2.925.518. An informed consent form in two copies was used for participants who agreed to participate in the study.

Results

Considering the studied population, we have below a histogram that shows the distribution of professionals according to age. It was observed that the population has mostly 77% of individuals between 25 and 45 years old. In the classification by gender, 21 individuals (32.8%) are men and 43 individuals (68.2%) are women. It can be seen that 31 individuals (47%) work between 6 to 10 years, that is, almost half of the population studied. The length of experience corroborates the proportion of the age histogram, that

is, most individuals are people who left college and soon after entered the field. For the use of antidepressants, the time of performance in function versus the use of antidepressants was evaluated.

Figure 1 shows that the highest incidence rate is between 1 to 5 years (32%) and 5 to 10 years (34%), that is, individuals with this length of experience have approximately 33% use of antidepressants. The data show a similarity with the studies by Maciel et al (2017) [7], which also characterize a population with a certain period of experience and with a similar rate of 37% of the use of antidepressants. People who declared that they are depressive, all confirmed the diagnosis by a specialized professional.

Regarding gender, we have a distribution of individuals who use or have used antidepressants. Considering the values found, we have a rate of 31% among women and 23% for men. The studies by Fleck (2009) [8] also show a higher proportion among women, corroborating the results. Considering the treatment, the time of use of antidepressants and the time to improvement were correlated.

As shown in **Figure 2**, it can be seen that there is no correlation between the time of use of antidepressants and the time to improve. This corroborates with Rozenfeld (2002) [11] and Brats (2012) [12] where it can be expected that treatment with antidepressants can vary considerably from individual to individual, so although there may be some minimum period of symptom perception, the improvement of the condition at a considerable level suitable can vary greatly in time.

However, when observing people who consider work exhausting and use or have already used antidepressants, it appears that the proportion is much higher in people who find work exhausting and use antidepressants, as shown in **Figure 3**, corroborating with Paulino et al (2009) [4] which attributes the use of antidepressants to situations of stress and physical and emotional exhaustion. However, it was not possible to establish a relevant main reason given that there was a similarity of reasons as shown in **Figure 4**.

Figure 1. Distribution of time of work and if you use or have used anti-depressants.
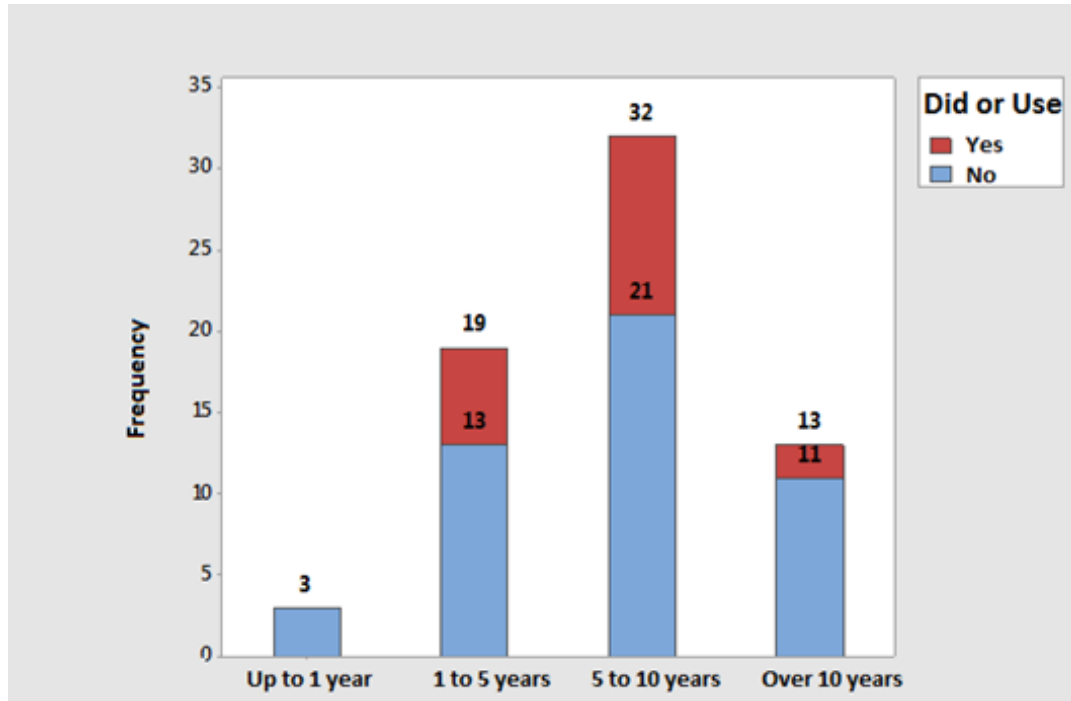

Figura 2. Regression analysis of the time of antidepressant use vs time to improvement.
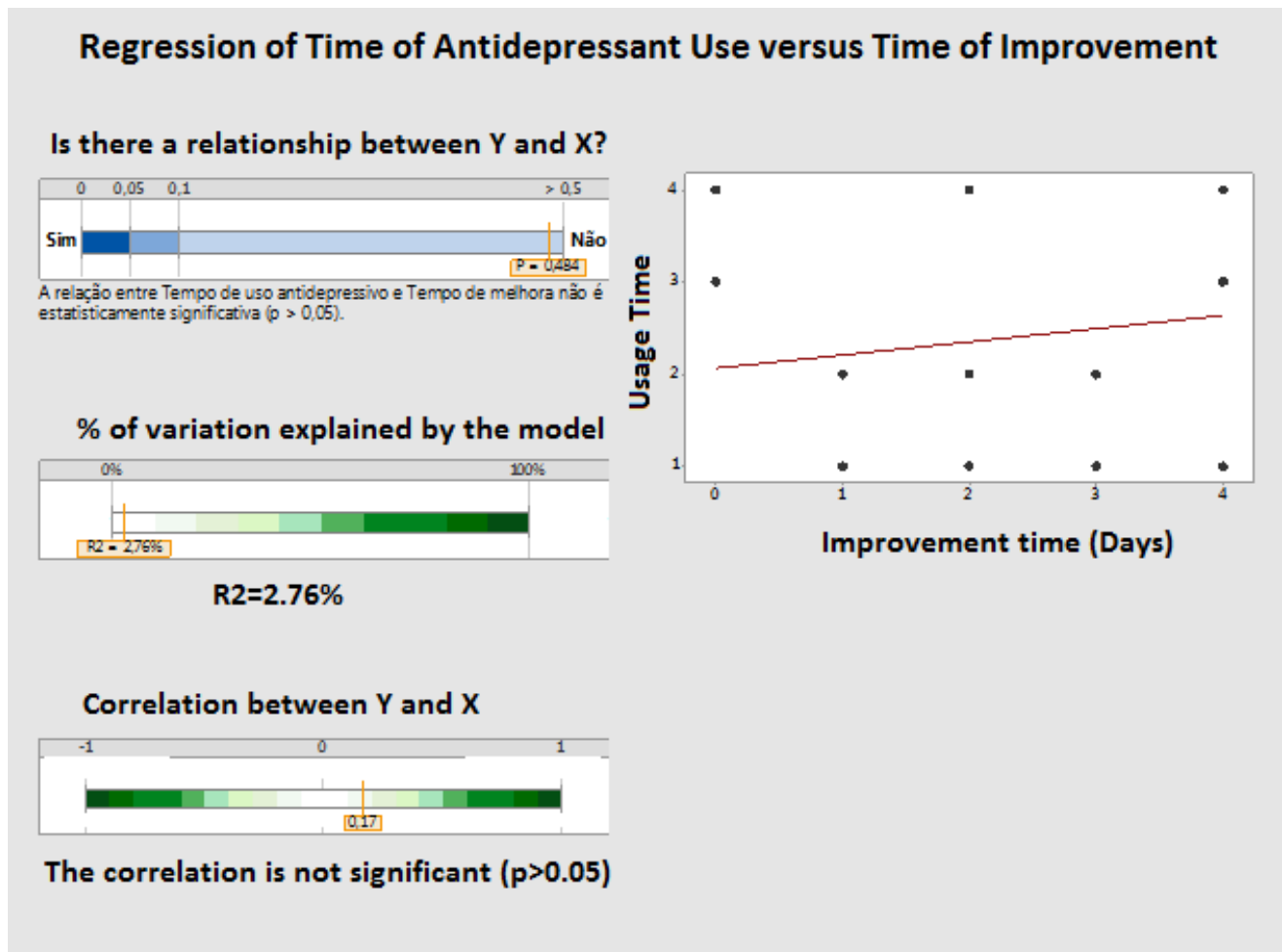
Figure 3. Analysis of opinion about work vs use of antidepressants.
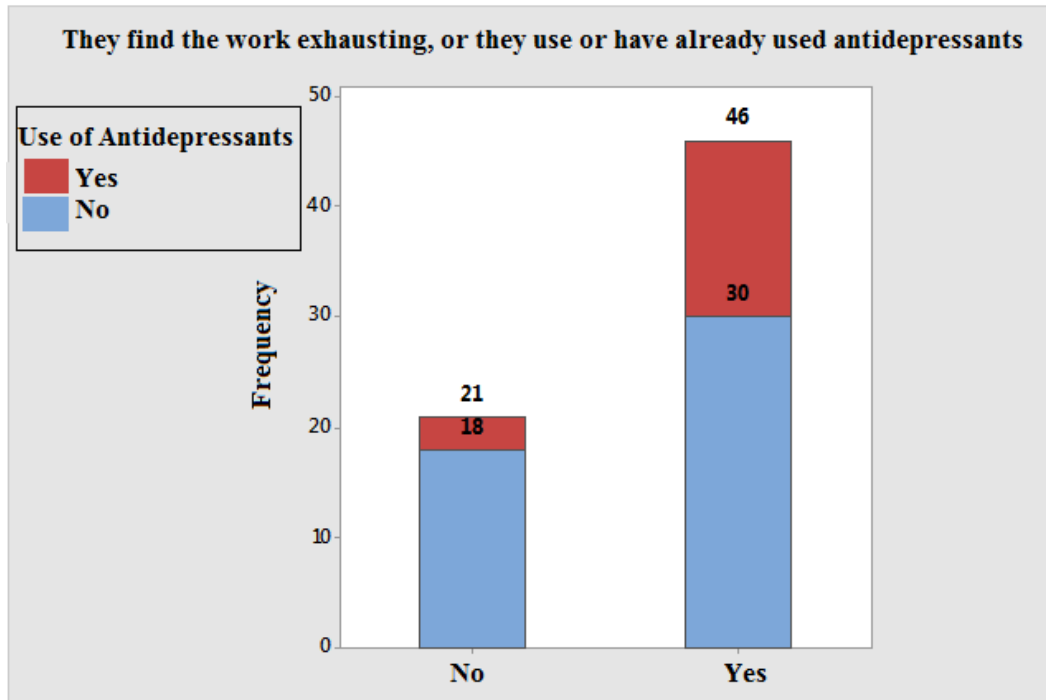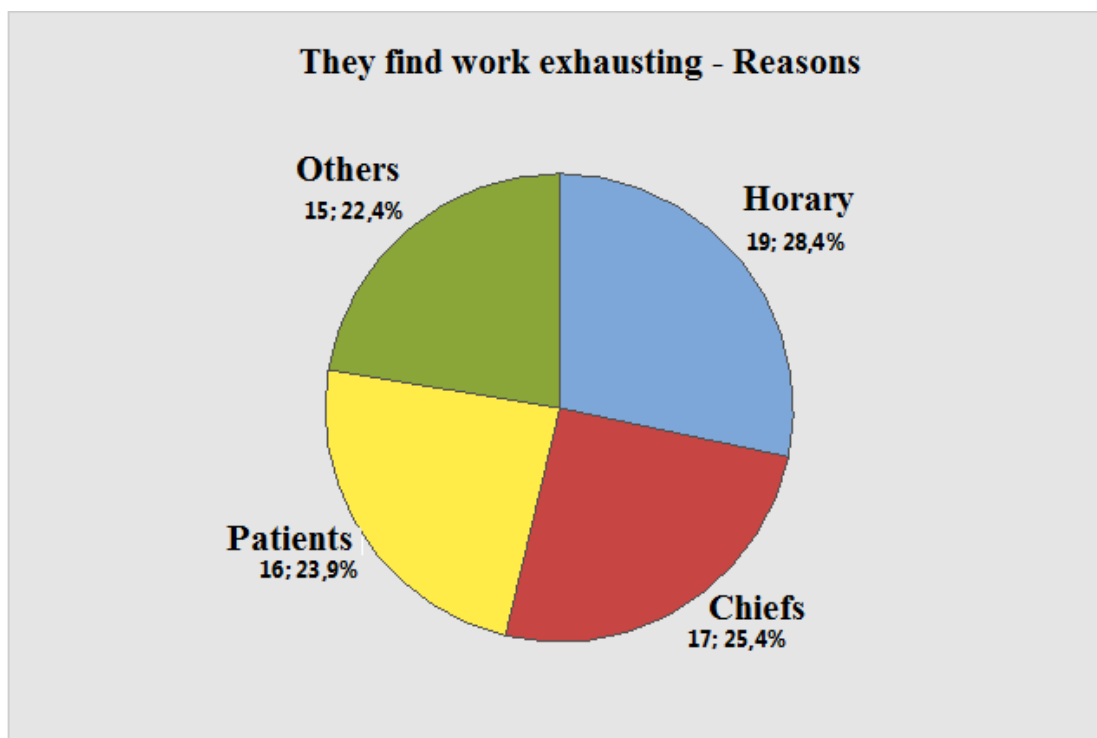

Figure 4. Analysis of reasons for finding the work exhausting.

Based on the analyzed data, the results show that the analyzed population follows previously studied similarities, regarding the length of work, which influences the degree of probability of using antidepressants, that the majority are female, and that the work itself, for several reasons, it triggers a stressful and exhausting condition, thus promoting a depressive condition and subsequent use of antidepressants.

Discussion

This study was carried out with the aim of increasing knowledge about depression and the propensity to use antidepressants in the nursing staff, relating their use to the length of experience in the nursing field, in order to know whether the development of depression at work is it common or not. As the number of cases of depression in Brazil has increased in

recent years and there are few studies of depression in the nursing staff so far, we decided to carry out this research.

In this sense, the heavy workload as a career can leave nurses overloaded and stressed. The demanding nature of the occupation exposes nurses to an increased risk of developing negative mental states such as depression, anxiety, and stress. Thus, a study assessed the prevalence and risk factors of these mental states in a representative sample of Australian nurses. The Depression, Anxiety, and Stress Scale were applied to 102 nurses. Information on demographic and work characteristics was obtained through lifestyle and internally designed questionnaires. The prevalence rates of depression, anxiety, and stress were 32.4%, 41.2%, and 41.2%, respectively. Binomial logistic regressions for depression and stress were significant (p = 0.007, p = 0.009). Job dissatisfaction significantly predicted a higher risk of nurses developing symptoms of depression and stress, respectively (p = 0.009, p = 0.011). Poor mental health among nurses can not only be harmful to the individual, but also affect professional performance and, in turn, the quality of care provided to the patient [14].

Besides, a study explored the risks and factors influencing anxiety, depression, and insomnia treatment among nurses. We used claims data obtained from the 2010 National Health Insurance Research Database (NHIRD) in Taiwan. Hospital nurses who had at least 3 coded outpatient care requests or 1 admission request with the main diagnosis of anxiety, depression, or insomnia were identified. A cohort of 46,120 nurses and 92,240 matched controls were included. All study subjects were followed until the beginning of any of the above-mentioned outcomes, death, or the end of 2012. The results showed that the adjusted risk ratios (HRs) for anxiety, depression, and insomnia treated among all nurses were 0.91 (95% CI, 0.88-0.95), 0.59 (95% CI, 0.55-0.63), and 1.43 (95% CI, 1.38-1.48), respectively. In addition, the risks of these psychiatric problems in nurses seeking health care were affected by age, gender, hospital level, and job stability. Thus, the results suggest that hospital nurses are at a lower risk of treated anxiety and depression than the general population, although they have a higher risk of treated insomnia [15].

Also, a randomized clinical trial looked at the effect of a 4-week mindfulness-based training intervention on improving stress, anxiety, depression, and job satisfaction among ward nurses. Thus, nurses with mild to moderate levels of stress, anxiety, and depression identified in a university hospital were invited to participate in the study. As a result, there was significant effect overtime on the level of stress, anxiety, depression, and mindfulness (p < 0.05). Regarding the difference between groups and interaction between time and group, there was a significant effect for anxiety (p = 0.037 p = 0.008) and job satisfaction (p <0.001, p = 0.40), respectively, with moderate size effect to reduce anxiety (0.465) and small to increase job satisfaction (0.221) [16].

Added to this, Burnout is an international phenomenon defined as a state of professional exhaustion. In this regard, a study analyzed the prevalence of burnout among health workers and explored the associations of burnout with professional and psychosocial factors and the risk of depression, professional harassment, sexual harassment, discrimination based on sexual orientation, consumption of antidepressants, anxiolytics, and also the individual's lifestyle: smoking, alcohol consumption, coffee consumption, physical activity and sleep quality. The survey took the form of a voluntary and anonymous online questionnaire carried out on the FramaForm1® platform and was disseminated through social networks, professional networks, and mailings. A high burnout rate was found with disparities according to the profession, sociodemographic data, seniority, and type of service. A significant rate of untreated depression was also found. This study provided evidence for policymakers to implement collective strategies to reduce burnout and depression in the different populations studied [17].

Also, especially in times such as the COVID-19 pandemic, all health professionals, especially nurses, are psychosocially affected by reasons such as uncertainty and work intensity. Thus, one assessed the levels of stress, depression, and burnout of front-line nurses. Data were obtained from 705 nurses who worked in hospitals during the COVID-19 pandemic between May and July 2020. The nurses were mostly women and held a bachelor's degree, were single, and had been working as nurses for between 1 and 10 years. They had high levels of stress, exhaustion, and moderate depression. Those who were younger and had fewer years of the professional experience felt inadequate in their nursing care and had higher levels of stress and burnout. More burnout was detected in nurses who had a positive COVID-19 test and did not want to work voluntarily during the pandemic [18].

Conclusion

Based on the present work, it can be inferred that the studied population has a profile similar to the studies regarding the work environment, its consequences on the quality of people's lives, and on the triggering of the

clinical picture of depression, physical and emotional exhaustion. Although it was not possible to infer the main cause of the promoter of such a clinical condition, it can be inferred that because these professionals work directly with human suffering, the work environment itself is already sufficient to leverage such a clinical condition.

Acknowledgement

Ethics approval
This study was analyzed and approved by the Research Ethics Committee (CEP) according to a substantiated opinion number 2.925.518, and obtaining the patient's consent through the Informed Consent Form (TCLE) according to CNS/CONEP Resolution 466/12.

Informed consent
The patient signed the consent form.

Funding

Data sharing statement
No additional data are available.

Conflict of interest
The authors declare no conflict of interest.

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