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Original Article

Depressive symptoms among nursing professionals: evidence from a university hospital in the context of the COVID-19 pandemic

Sintomas depressivos em profissionais de enfermagem: evidências de um hospital universitário no contexto da pandemia da COVID-19

Síntomas depresivos en profesionales de enfermería: evidencias de un hospital universitario en el contexto de la pandemia de la COVID-19

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ABSTRACT

Objective: To analyze the association between depressive symptoms and levels of depression among nursing professionals in a hospital institution during the COVID-19 pandemic, discussing implications for the post-pandemic scenario. **Methods:** A cross-sectional epidemiological study conducted at a university hospital in Uberlândia, Minas Gerais, Brazil, involving nursing professionals who provided care to patients with COVID-19. Sociodemographic, economic, and occupational questionnaires and the Beck Depression Inventory were administered via an electronic form, and data were analyzed using R software version 3.6. **Results:** A total of 290 professionals participated, predominantly women (71.7%), of mixed race (50.0%), and with technical-level training (60.3%), most of whom were classified as having minimal depression (75.6%). The prevalence of depressive symptoms was higher among individuals with a higher education degree in nursing and a workload of 40 hours or more per week. Eleven symptoms from the Beck Depression Inventory showed statistical significance. **Conclusion:** The findings highlight key symptoms associated with these professionals and reinforce the need for permanent institutional strategies for prevention, support, and mental health monitoring in the post-pandemic period.

DESCRIPTORS:
Depression; Nursing; COVID-19; Mental Health; Epidemiology.

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RESUMO

Objetivo: Analisar a associação entre sintomas e níveis de depressão em profissionais de enfermagem em uma instituição hospitalar no período pandêmico da COVID-19, discutindo implicações para o cenário pós-pandêmico. **Métodos:** Estudo epidemiológico transversal, realizado em hospital universitário de Uberlândia (MG), com profissionais de enfermagem que assistiram pacientes com COVID-19. Aplicaram-se questionário sociodemográfico, econômico, laboral e o Inventário de Depressão Beck, via formulário eletrônico, e analisado no software R 3.6. **Resultados:** Participaram 290 profissionais, majoritariamente mulheres (71,7%), pardas (50,0%) e com formação técnica (60,3%), em sua maioria classificada com depressão mínima (75,6%). A prevalência de sintomas depressivos foi maior entre indivíduos com nível superior em enfermagem e carga horária igual ou superior a 40 horas. Onze sintomas do Inventário de Beck apresentaram significância. **Conclusão:** Os achados evidenciam sintomas-chave associados a esses profissionais e reforçam a necessidade de estratégias institucionais permanentes de prevenção, acolhimento e monitoramento em saúde mental no período pós-pandêmico.

DESCRITORES:

Depressão; Enfermagem; COVID-19; Saúde Mental; Epidemiologia.

RESUMEN

Objetivos: Analizar la asociación entre los síntomas y los niveles de depresión en profesionales de enfermería de una institución hospitalaria durante el período pandémico de la COVID-19, discutiendo las implicaciones para el escenario pospandémico. **Métodos:** Estudio epidemiológico transversal realizado en un hospital universitario de Uberlândia, Minas Gerais, Brasil, con profesionales de enfermería que atendieron a pacientes con COVID-19. Se aplicaron cuestionarios sociodemográficos, económicos y laborales, así como el Inventario de Depresión de Beck, mediante formulario electrónico, y los datos fueron analizados con el software R versión 3.6. **Resultados:** Participaron 290 profesionales, predominantemente mujeres (71,7%), de raza parda (50,0%) y con formación técnica (60,3%), la mayoría clasificada con depresión mínima (75,6%). La prevalencia de síntomas depresivos fue mayor entre los individuos con nivel superior en enfermería y carga horaria igual o superior a 40 horas semanales. Once síntomas del Inventario de Depresión de Beck presentaron significancia estadística. **Conclusión:** Los hallazgos evidencian síntomas clave asociados a estos profesionales y refuerzan la necesidad de estrategias institucionales permanentes de prevención, acompañamiento y monitoreo de la salud mental en el período pospandémico.

DESCRIPTORES:

Depresión; Enfermería; COVID-19; Salud Mental; Epidemiología.

INTRODUCTION

The mental health of nursing workers has become a scientific and institutional priority, given the increase in work-related mental disorders and the impact of psychological distress on the quality of care, absenteeism, and retention of professionals. Even after the COVID-19 health emergency subsided, evidence indicates that its psychosocial effects persist and reverberate in the daily lives of services, configuring a post-pandemic legacy for frontline workers[1-2].

Work plays a central role in socialization processes, identity construction, and the promotion of individual well-being, with physical and mental conditions being directly related to work activities and the occupational environment, which constitutes a complex interaction between health and work. In this

context, the association between professional practice and the development of mental disorders has been widely discussed in the literature, being influenced by several factors, such as excessive working hours, the presence of multiple employment relationships, and the high demands of the labor market. In the health field, especially among nursing professionals, there is a constant need for emotional balance in the face of daily exposure to situations of risk, suffering and insecurity, in addition to physical and mental strain and the responsibility inherent in caring for human life. These conditions can contribute to the emergence of psychological suffering, anxiety, depression and stress, negatively impacting the assistance provided and the quality of care offered[1-2].

Depression is characterized by symptoms such as loss of interest or pleasure, sadness, low self-esteem, guilt, changes in sleep and appetite, as well as difficulties concentrating, significantly compromising the individual's functioning in different spheres of daily life, such as work, study and family relationships. Its symptoms can be classified as emotional, cognitive, physical and motivational, including feelings of hopelessness and unhappiness, memory impairment and negative thoughts, fatigue and physiological changes, as well as reduced motivation and self-care, and in more severe cases, may progress to social isolation and suicidal ideation[3-4].

During the pandemic, nursing professionals experienced continued exposure to death, therapeutic uncertainty, ethical dilemmas, resource scarcity, fear of contamination, and intensified workload. These stressors were associated with depressive symptoms, anxiety, sleep disorders, and moral distress in different contexts[5-6].

In the current scenario, the discussion shifts from the acute event to the prolonged consequences: the pandemic experience may have acted as a trigger or accelerator of depressive states, with the potential for recurrence, in addition to exacerbating occupational vulnerabilities already present in nursing. Brazilian studies point to an association of work-related factors, such as working hours, reduced autonomy, and compromised social support, with stress, anxiety, and depression in a hospital setting[7-8].

Understanding which symptoms are most associated with depression in nursing professionals in a university hospital is relevant to guide worker health surveillance strategies and psychosocial care interventions that are maintained beyond the health crisis. From a nursing perspective, it is expected that the findings of this study will contribute to strengthening the Brazilian literature on the mental health of nursing professionals in the context of coping with the COVID-19 pandemic. Furthermore, it is intended that the results will support the development and implementation of prevention strategies, as well as interventions aimed at managing anxiety and depression, with an emphasis on promoting and providing comprehensive mental health care for these professionals.

OBJECTIVE

To analyze the association between depressive symptoms and depression levels in nursing professionals working in a university hospital during the COVID-19 pandemic, discussing implications for the post-pandemic scenario.

METHODOLOGY

Study design, site and period

This is a quantitative, epidemiological, and cross-sectional study conducted in the city of Uberlândia, Minas Gerais state, Brazil, characterized as a public health service.

Sample

Nursing professionals (nurses, technicians, and nursing assistants) linked to the institution and with at least three months of experience in caring for patients affected by COVID-19 participated. The final sample consisted of 290 professionals, defined from a population of 1,180 workers, a number provided by the Research Management Unit, based on sample size calculations for epidemiological studies obtained through counting for finite proportions in epidemiological studies, which obtains a confidence level of 95% and an error margin of 5%, performed in the R package "pwr"[9].

The inclusion criteria were limited to nursing professionals with a formal link to the hospital, as well as those who had at least three months of experience working directly with patients affected by COVID-19 during the pandemic period. In this context, for exclusion, the criteria used were professionals who were absent, on leave, or on vacation.

Data collection

To collect the necessary information, a socioeconomic and demographic questionnaire was used, focusing on the investigation of social, demographic, economic, health and professional data, developed by Nobre[10], and the Beck Depression Inventory (BDI), 1988 version, an instrument created by Beck in 1961 and which, after several analyses that prove its psychometric properties, has come to be considered useful both for the clinical area, and consequently for research, as well as for the general population [11]. The inventory has 21 self-reported items that are scaled with variations from 0 to 3 points and result in the evaluation of frequent symptoms in individuals with depressive disorders, such as sadness, irritability, insomnia, crying, feelings of failure, among others. The total score was interpreted using the values established by the literature, which consists of: Minimal - 0 to 9 points; Mild - 10 to 16 points; Moderate - 17 to 29 points; Severe - 30 to 63 points[12].

The data collection was carried out entirely remotely, between November 2022 and February 2023, through an online questionnaire applied via Google Forms and disseminated via WhatsApp and email to volunteers, without the need for audio or video recordings, and did not generate direct benefits to the participants, although the results may support institutional actions aimed at the mental health of nursing professionals. The risks involved possible emotional discomfort, with the freedom to withdraw and access to institutional psychological support guaranteed. The secrecy and confidentiality of the data were ensured, which will remain archived for five years under the responsibility of the researcher.

Statistical analysis

The data were taken from questionnaires answered by volunteers and placed in a database in Microsoft Office Excel software, and for descriptive and inferential analyses of the data obtained by the BDI, sociodemographic, economic and work factors, the statistical package R 3.6[13] was used. Prevalence and its 95% confidence intervals were performed using the 'fBasics'[14] and 'epiDisplay'[15] functions. The 'psych'[16] function was used to check the assumptions of mutually exclusive categories, independence of observations and multicollinearity.

The Quasipoisson model with robust variance was used to obtain the prevalence ratio, according to the 'gml2' function. Probability values were obtained by the Z Test, 'lmtest' function. Nagelkerke's Pseudo-R^2 was obtained using the 'DescTools' function. For the reliability of the BDI responses, Cronbach's Alpha was used through the Cronbach function[17-20].

The results on the association between depression and socioeconomic, demographic, and work-related factors were organized in a table according to the intensity of depressive symptoms (minimal, mild, moderate, and severe). The prevalence ratio of depression was presented according to the items of the Beck Depression Inventory, ordered by the value found. Moreover, a table was prepared to show the prevalence of socioeconomic, demographic, and laboratory factors related to depressive symptoms. The interpretation of the results was based on related scientific studies, considering assessment, population, location, methodology, and instruments used.

Ethical aspects

This research was submitted to and approved by the teaching and research management of the university hospital under process number 23860.004523/2021-33, as well as by the Research Ethics Committee of the Federal University of Alagoas (UFAL) under opinion N. 5.539.627, following the guidelines of Resolution 510/2016 and Resolution N. 466/2012 of the National Health Council (CNS).

RESULTS

The participants were 290 professionals. Table 1 presents the sociodemographic, economic, and labor characteristics of the sample.

Table 1. Sociodemographic, economic, and work-related characteristics of nursing professionals at the University Hospital of Uberlândia who worked during the COVID-19 pandemic, in the period 2022-2023.

Variable	n	%	$CI_{95\%}$[a.b]
Sex			
Female	208	71.7	(66.0 – 77.0)
Male	82	28.3	(23.0 – 34.0)
Race			
White	109	37.6	(32.0 – 43.0)
Black	36	12.4	(8.8 – 17.0)
Brown/mulato	145	50.0	(44.0 – 56.0)
Marital Status			
Single	139	47.9	(42.0 – 54.0)
Married/stable union	132	45.5	(40.0 – 51.0)
Separated	19	6.6	(4.0 – 10.0
Children			
No	153	52.8	(41.0 – 53.0)
Yes	137	47.2	(47.0 – 59.0)
Family income (m.w.)[c]			
1.6 - 2.5	3	1.1	(0.2 – 3.0)
2.6 - 3.0	108	37.2	(32.0 – 43.0)
> 3.0	179	61.7	(56.0 – 67.0)
Degree			
Technician	175	60.3	(54.0 – 66.0)
College	115	39.7	(34.0 – 46.0)
Function			
Nur. Technician/Assistant.	198	83.9	(63.0 – 74.0)
Nurse	92	31.7	(26.0 – 37.0)
Employments[c]			
1	221	76.2	(71.0 – 81.0)
2	61	21.1	(16.0 – 26.0)
3	7	2.4	(0.9 – 4.9)
>3	1	0.3	(0.0 – 1.9)
Weekly workload			
24 - 30	149	51.4	(45.0 – 57.0)
40	79	27.2	(22.0 – 33.0)
> 40	62	21.4	(17.0 – 27.0)

[a] 95% Confidence Interval in percentage. [b] Binomial distribution for population-based proportions ($p<0.05$). [c] Minimum wage (Value: BRL 1,302.00 Base year: 2023 - Serviços e Informações do Brasil Gov.br 2023).

When observing the prevalence of attitudes and symptoms related to depression levels, which confirms the existence of a significant association (p<0.01) for both the intensity of symptoms on the Beck Depression Inventory in relation to depression levels and for their prevalence, it was revealed that the majority of individuals (75.6%) were classified as being at the minimum level, 14% mild, 8.6% moderate, and 1.6% severe.

Table 2 presents the prevalence ratio (PR) for depression when associated with the symptoms assessed in the BDI, in which the items are listed in order of highest PR to lowest, thus, it is interpreted that the higher the prevalence ratio, the greater the risk factor for potentiating the depressive disorder.

Table 2. Prevalence ratio for depression associated with BDI items in nursing professionals at the University Hospital of Uberlândia, who worked during the COVID-19 pandemic, in the period 2022-2023.

Variable (Symptoms)[1]	***Beta´s***[2]	***p*-value**[3]	**PR**[4]	**$CI_{PR95\%}$**[5]
Deception	0.19	<0.001	1.20	(1.14 - 1.28)
Sadness	0.10	<0.001	1.10	(1.05 – 1.15)
Appearance	0.08	<0.001	1.09	(1.05 – 1.12)
Appetite	0.09	<0.001	1.09	(1.04 – 1.14)
Concern	0.09	<0.001	1.09	(1.05 – 1.13)
Criticism	0.08	<0.001	1.08	(1.04 – 1.12)
Interest	0.07	<0.001	1.08	(1.03 – 1.13)
Failure	0.07	0.01	1.07	(1.02 – 1.13)
Work	0.07	<0.001	1.07	(1.03 – 1.12)
Irritation	0.06	<0.001	1.06	(1.02 – 1.10)
Sleep	0.05	0.01	1.05	(1.01 – 1.08)

[1] Variables/items ordered from highest to lowest PR value (p<0.05). [2] Coefficients of the Quasipoisson model with robust variance. [3] Z Test. [4] Prevalence Ratio. [5] 95% confidence interval for RP.

When questioning the association between the eleven symptoms and attitudes of significant prevalence ratio with sociodemographic, economic, and work characteristics, it is demonstrated that in the face of disappointment (p-value = 0.02; 95% CI_{PR} = 1.1 - 3.8), the greater the professional's weekly workload, the greater the possibility of potentiating depression, totaling slightly more than twice the risk. Workload also influences the potential for developing depressive symptoms related to feelings of failure (p-value = 0.02; 95% CI_{PR} = 1.1 - 3.9), with professionals who work more having 2.07 times more chance of potentiating depression than those who work less during the week.

Lack of interest in other people was the only attitude that showed an association with the worker's marital status (p-value = <0.001; 95% CI_{PR} = 1.0 - 2.1), with a 1.05 times greater chance of increased depression for married individuals or those in a stable relationship.

Concerning self-criticism (p-value = 0.04; 95% CI_{PR} = 1.0 - 3.7), nurses showed a 1.97 times greater chance compared to nursing technicians and assistants. Training is also related to irritability (p-value = 0.001; PR = 2.80; 95% CI_{PR} = 1.7 - 4.6), and the chance of exacerbating the illness is 2.80 times greater.

In the results for the symptoms 'appetite', 'effort to work', 'sleep', 'appearance', and ‘concern’, the association with the variables also showed significance with the professionals' education level; in this study, nurses are the risk factor. Appetite (p-value = 0.03; 95% CI_{PR} = 1.0 - 6.5) showed a 2.72 times greater chance of worsening depression, while effort to work (p-value = <0.001; 95% CI_{PR} = 1.4 - 4.4) has a 2.49 times greater possibility for professionals with higher education.

Sleep (p-value = <0.001; 95% CI_{PR} = 1.3 - 3.6), appearance (p-value = 0.01; 95% CI_{PR} = 1.2 - 4.2), and concern (p-value = 0.02; 95% CI_{PR} = 1.1 - 4.5) are synergistic in the formation of symptoms. With a ratio of 2.21 for sleep, 2.29 for appearance, and 2.30 for concern.

Therefore, having higher academic education, with a weekly workload equal to or greater than 40 hours, being married, in a stable union, or separated, are risk factors for developing depressive symptoms.

The other explanatory variables did not show statistical significance regarding the reported symptoms. Finally, the reliability of the Beck Depression Inventory responses was confirmed using Cronbach's Alpha tool, with a very good rating (0.9) for this test, indicating a high level of reliability in the responses obtained from the study volunteers.

DISCUSSION

The results showed a predominance of female professionals, self-declared brown/mulatto, mostly single, with children, family income above three minimum wages, technical training, single employment and weekly working hours between 24 and 30 hours. The greater female participation in nursing reflects a consolidated historical and cultural context, corroborated by studies carried out in medium and high complexity public hospitals, including in the fight against COVID-19[21]. Regarding race/color, although this study identified a predominance of brown/mulatto individuals, other investigations point to a higher proportion of white professionals, which can be interpreted in the light of historical inequalities in nursing education, marked by processes of elitism and whitening[22].

The predominance of technical training (60.3%) can be explained by the greater need for technicians and assistants for the functioning of hospital units, considering the number of beds and the care dynamics. Regarding income, the predominance of values higher than three minimum wages may

be associated with the remuneration pattern of university hospitals, differing from other contexts studied. Finally, the presence of only one employment relationship and the weekly workload between 24 and 30 hours can be justified by the work regime adopted by EBSERH, which establishes this schedule as an institutional standard[23].

The results of the association between symptoms and depression levels are important for the clinical analysis of individuals already diagnosed and possible diagnoses. In this study, all 21 symptoms/attitudes of the Beck Inventory obtained statistical significance, stating that these items should be considered when discussing depressive disorder.

The significance represents that these items are related to depressive disorders and should be discussed in these cases. Regarding the definitions of depression levels, a higher percentage of individuals are observed to be not depressed; however, it is necessary to analyze the other levels, as well as the intensity presented in the data from the mild, moderate, and severe levels, and in those classified as minimal, since they may be conducive to the appearance or worsening of the symptom later on.

The findings show a significant presence of depressive symptoms in nursing professionals, with a significant association of 11 items from the BDI, reinforcing the usefulness of the instrument for screening and characterizing psychological distress in an occupational context. Although data collection took place during the pandemic, the interpretation of the results remains current, as the post-pandemic period has been marked by persistent mental illness, increased absences, and difficulties in retaining nursing professionals in hospital services, phenomena discussed in recent literature[24].

The symptoms analyzed according to the prevalence ratio presented eleven items with the highest statistical value. Disappointment, sadness, appearance, appetite, and concern were the variables with the highest values in terms of prevalence ratio. These are the items that may attract greater clinical attention to these symptoms, indicating possible greater suffering in the depression process, in addition to demonstrating that it is a useful result for diagnosis and treatment, following the classification criteria of the DSM-5 of the APA, published in 2014[25]. In the same context, it is necessary to discuss the other symptoms presented in this work that are relevant to the investigation of these disorders. Self-criticism, interest, failure, concern about work, irritation, and aspects of sleep are the items that complete the table of statistical significance.

Concerning sociodemographic, economic, and work characteristics, a predominance of symptoms related to the volunteers' training was observed. This is an extremely relevant factor, since nurses have diverse responsibilities, going beyond what is established by their governing council. These workers are at the head of a nursing team and are primarily responsible for decision-making in their area of work[26]. In this sense, the attitude of showing effort at work is analyzed, in which the extent to which this professional feels forced to perform some work activity is evaluated.

The future prospects for the development of depression in future nurses is also a worrying factor, even if it is not an objective of this study. According to research conducted with nursing students, higher education students may present depressive symptoms during their undergraduate studies and later, while working in the profession[27].

In line with international studies, the associated symptoms (e.g., sadness, sleep disturbances, and irritability) are consistent with the experience of extreme stress lived by frontline workers. Reviews and studies highlight that the work environment, the availability of social support, and autonomy at work influence the concomitant presence of stress, anxiety, and depression in nursing professionals in the hospital setting [28-29]. During the COVID-19 pandemic, nurses were in intermittent contact with patients, as at other times in their professional lives. However, it is undeniable that the emotional burden was exacerbated when these individuals became increasingly important for the care of those affected by the virus, since the responsibility was greater, as well as society's view of nursing work being heightened.

The association between longer working hours and a higher prevalence of symptoms (disappointment and failure) reinforces the role of working conditions in the production of psychological suffering. Prolonged working hours, multiple jobs, and insufficient rest can reduce the capacity for emotional recovery and favor depressive states. In Brazil, studies with nursing teams in university hospitals during COVID-19 also pointed to significant levels of anxiety, depression, and stress, with emphasis on work-related variables [27]. Statistical results demonstrated a relationship between the symptoms of disappointment, sadness, and failure and weekly working hours, that is, a greater number of weekly hours worked increases the likelihood of the professional aggravating the depressive state. In this context, it can be considered that excessive dedication to work and the scarcity of moments of rest and leisure make mental and physical illness possible. The research by Appel, Carvalho and Santos[30], which also analyzes the prevalence and factors associated with depression in a nursing team during the COVID-19 pandemic at a university hospital in the southern region of Brazil, demonstrated a predominance of professionals with working hours ranging from 36 to more than 40 hours per week, and the authors highlight the significant number of depression cases in all classifications, characterizing the vulnerability to mental suffering in this population.

From a clinical and organizational point of view, symptoms such as disappointment, self-criticism and a sense of failure may reflect moral suffering and frustration in the face of care limitations and institutional recognition, aspects discussed in reviews that problematize the well-being of nursing in coping with COVID-19 and in the subsequent period[27]. This suggests that worker health programs should integrate individual actions (reception, screening and referral) and interventions at the work level (staffing, work process organization, leadership support and a culture of psychological safety).

This study contributes by identifying symptoms with a higher prevalence rate for depression, offering a map of priority signs for mental health surveillance. Hospital services should adopt permanent, evidence-based psychosocial monitoring and care strategies, especially for professionals exposed to long working hours and high emotional demands. Future studies, preferably longitudinal, could explore post-pandemic trajectories and the persistence of symptoms over time.

Study Limitations

Among the main limitations are the methodological choices of the study, such as its cross-sectional nature, considering that the data were collected at a single point in time, making it impossible to analyze the evolution of depressive symptoms over time. In addition, the possibility of selection bias associated with online data collection stands out. The use of an electronic questionnaire, disseminated through digital platforms such as WhatsApp and email, may have restricted participation to individuals with greater internet access, familiarity with digital technologies, or greater availability of time, which may compromise the representativeness of the sample.

Another limitation refers to the use of a self-report instrument, such as the Beck Depression Inventory (BDI). This type of instrument depends on the subjective perception of the participants, and may be influenced by factors such as individual interpretation of the questions, desire for social acceptance, or under/overestimation of symptoms, which may introduce bias in the responses. It is also worth noting the impossibility of inferring causality between the variables analyzed. Although the study allows us to identify associations between sociodemographic and professional factors and levels of depression, it is not possible to establish cause-and-effect relationships, and longitudinal studies are needed for a better understanding of these relationships.

Another point that deserves highlighting concerns the fact that the investigation was carried out in a single hospital institution, which restricts the extrapolation of the results to other healthcare settings. University hospitals have organizational, care, and management particularities that may differ significantly from general, private, or smaller hospitals. Finally, most national and international studies related to the topic do not yet cover the same methodology used in this study. Therefore, making comparisons and corroborating findings becomes a challenge, despite certain similarities when analyzing symptoms that appear in different data collection instruments.

Contributions for the Nursing Area, Health and Public Policy

From the perspective of improving practices involving the understanding and treatment of depression in healthcare professionals, this study is highly relevant to both social and scientific domains. Similarly, it is expected to contribute to the development of future research, aiming to standardize approaches in managing the routines of these affected workers. Specifically for nursing, it is hoped that

the results will affect the understanding of diagnosed depression in these individuals, focusing on promoting appropriate treatment, as well as preventive actions for future complications that the condition may cause.

CONCLUSION

The findings of this study allowed us to characterize the sociodemographic, economic, and labor profile of nursing professionals working in a university hospital, highlighting the predominance of females, individuals who self-identified as mixed-race, with technical training, a single employment relationship, and a weekly workload compatible with the institutional regime. These results reflect historical, social, and organizational aspects of the profession, while also revealing possible structural inequalities still present in the training and insertion of these workers. Regarding mental health, a significant presence of depressive symptoms was identified, with a statistically significant association between several items of the Beck Depression Inventory, highlighting manifestations such as sadness, disappointment, changes in appetite, and worries, which reinforces the applicability of the instrument in screening for psychological distress in occupational contexts.

Furthermore, it was observed that factors related to working conditions, especially the weekly workload, have a significant influence on the intensification of symptoms such as failure, disappointment, and sadness, highlighting the direct impact of the work environment on the mental illness of these professionals. Even with a higher proportion of individuals classified as not depressed, the presence of minimal, mild, moderate, and severe levels of symptoms signals the need for ongoing attention, considering the potential for worsening over time. In this context, the importance of institutional strategies aimed at promoting mental health stands out, including prevention actions, early screening, psychological support, and organizational interventions that provide better working conditions. Finally, the need for expanded studies, especially longitudinal ones, is highlighted in order to deepen the understanding of causal relationships and support the development of effective policies for mental health care for nursing professionals.

The research also highlights the importance of caring for the mental health of nursing professionals, considering their central role in promoting care, well-being, and humanization in care. Caring for these workers is essential to ensure dignified working conditions and prevent physical and mental illnesses. Finally, the need for further studies is reinforced, especially in different contexts of practice and in the post-pandemic scenario, as well as the standardization of psychological assistance actions. These measures are essential to promote mental health and improve the working conditions of these professionals.

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