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ORIGINAL ARTICLE

PREVALENCE OF VIOLENCE AGAINST HEALTH PROFESSIONALS DURING THE COVID-19 PANDEMIC[1]

Josyenne Assis Rodrigues*
Luciana Contrera**
Elenir Rose Jardim Cury***
Patrícia Moita Garcia Kawakame****
Natálly Quintana Coelho Bertuzzi*****
Alberth Rangel Alves de Brito******

ABSTRACT

Objective: To identify the prevalence of work-related violence among health professionals during COVID-19. **Methods:** A cross-sectional analytical study was conducted in 36 health units, between October and December 2020, with 174 professionals. Data collection was done through a semi-structured questionnaire available through Google Forms, containing sociodemographic data and questions about violence at work. The statistical analysis used Cox regression. **Results:** The prevalence of violence was 76.4%, with a predominance of verbal violence (95.5%), followed by moral/psychological violence (36.9%), physical violence (19.6%) and sexual harassment (12.8%). Significant associations were found between sexual harassment and sex, moral/psychological violence and marital status, and physical aggression and time in the unit. The underreporting rate was 79.5%. **Conclusion:** Violence at work during the pandemic was worrying, with impacts on the health of professionals. Preventive strategies and improvements in notification mechanisms are essential to address this problem.

Keywords: Workplace violence. Occupational health. Health personnel. COVID-19.

INTRODUCTION

The COVID-19 pandemic, which began in December 2019, has brought unprecedented challenges to health systems around the world. In Brazil, health professionals were key to coping with the pandemic, assuming critical roles in assisting patients affected by the virus, often under extreme working conditions. In addition to dealing with the increased demand for services, these professionals also faced high levels of violence at their workplaces[1,2].

According to the International Labor Organization (ILO), "violence and harassment in the world of work" refers to "a set of unacceptable behaviors and practices, or their threats, of single or repeated occurrence, which aim, cause, or are likely to cause physical, psychological, sexual or economic harm"[3:2]. ILO Convention n. 190 expands this definition to include gender-based violence and harassment[3].

Health professionals have a significantly higher risk of violence compared to workers in other areas [4,5]. Study conducted during the pandemic in Brazil, Colombia, El Salvador and Peru revealed that eight out of ten health professionals suffered some kind of violence at work, reflecting the social inequalities that mark the dynamics of work in the sector[1].

In Brazil, a survey identified that 47.6% of health professionals reported having been victims of violence, mostly in the form of psycho-verbal aggressions, and predominantly practiced by people from the work environment[5]. In São Paulo/SP and Santa Catarina/SC, more than half of the professionals reported violence at work in 2020, with assaults committed by patients, companions and co-workers. The prevalence of sexual violence is

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*Nurse. Master in nursing. Primary Health Care Nurse at the Walfrido Ferreira Azambuja- Alves Pereira Family Health Unit – Vila Nasser. Campo Grande, Mato Grosso do Sul. E-mail: josyennerodrigues@hotmail.com ORCID iD: 0000-0001-5426-2362.
**Nurse. PhD in Infectious and Parasitic Diseases. Associate Professor at the Integrated Health Institute – INISA/UFMS. E-mail: l.contrera@ufms.br . ORCID iD: 0000-0002-8751-0817.
***Dentist. PhD in Public Health. Full Professor at the Integrated Health Institute – INISA/UFMS. Email: elenir.cury@ufms.br ORCID iD: 000-0003-2711-0667.
****Nurse. PhD in Health Sciences. Associate Professor of the Medicine Course at the Três Lagoas Campus of UFMS. Email: patriciamoita@ufms.br ORCID iD: 000-0003-2562-3506.
*****Nurse. Resident of the Multidisciplinary Residency Program in Critical Patient Care at INISA/UFMS. Email: natally.coelho@ufms.br. ORCID iD: 000-0003-2562-3506.
******Nurse at work. Master in Nursing. Nurse at the State Department of Health (SES-MS). E-mail: alberthrangel@hotmail.com. ORCID iD: 0000-0002-6458-8195

also highlighted, affecting mostly women[6].

The lack of effective security measures and unrestricted access to sensitive areas in health institutions were identified as contributing factors to this reality in a study conducted at a hospital in Lisbon, Portugal[4].

In addition to the urgent need for protection and safety, violence at work directly affects the health and well-being of workers. Studies indicate that violence can result in low job satisfaction rates, increased absenteeism and the need for a rapid readjustment of work routines due to changes in health recommendations, affecting both the quality of care and the mental health of professionals[5,7]. This context makes the approach to violence in the workplace a very important issue, not only to ensure the physical and psychological integrity of professionals, but also to ensure the continuity and quality of health services.

Understanding the manifestations of violence in the workplace is essential for the creation of preventive measures and interventions that meet the needs of workers, promoting safety and well-being among health professionals[8].

Considering the intense stress faced by health care teams during the COVID-19 pandemic, in addition to the many uncertainties of this period, and recognizing the importance of ILO Convention n. 190[3], which proposes the elimination of harassment in the world of work, this study had as guiding question: What is the prevalence of work-related violence among health professionals during the COVID-19 pandemic, and what are the main characteristics of the aggressions suffered? The main objective of this study was to identify the prevalence of work-related violence among health professionals during COVID-19, as well as understand the characteristics of aggressions and provide inputs for the development of effective interventions in the health care network.

METHODS

Prevalence study, cross-sectional analytical, conducted in 36 health units of the city of Campo Grande, MS, from October to December 2020, covering two Regional Health Centers (RHC), three Emergency Care Units (UPA), three Psychosocial Care Centers (CAPS), and 28 Basic Health Units (BHU) and Basic Family Health Units (BFHU) of the five Health Regions that make up the Health Care Network (HCN): Bandeira, Imbirussu, Prosa Region, Anhanduizinho, Central, Lagoa Region and Segredo Region.

The Strengthening the reporting of observational studies in epidemiology (STROBE) was used to guide the report of the study, aiming to ensure transparency, replicability and quality of the information presented.

The study included doctors, nurses, nursing assistants and technicians, dentists, speech therapists, social workers, pharmacists, community health agents, and administrative area workers who worked in the Health Care Network and psychologists of the Psychosocial Care Network.

The sample calculation was performed using the following parameters: population of 4,039 health professionals, prevalence of violence of 36.5% (±7%), obtained in a pilot test and significance level of 5%, which resulted in 174 participants.

The determination of sampling was conducted in two stages. In the first stage, the researcher selected by random the health units among BHU, BFHU, CAPS, RHC and ECU according to the health regions of the city, using tables with random numbers. Then, the professionals who worked in the selected health units and who agreed to participate in the study were included in the sample. There was no random selection of health professionals, which characterized a non-probabilistic sampling technique by quotas.

Professionals with at least three months of practice were included in the study, without limitation to the maximum service time, for both in statutory and CLL regime who agreed to participate in the study by signing the Informed Consent Form (ICF).

The study did not include professionals who were on vacation, leave of any kind, dismissed for medical leave or disability, and those who, after three attempts to contact for data collection, could not be reached.

The data collection was carried out by means of a digital instrument, accessible through Google Forms, through the link

https://forms.gle/bXS4sEXKsSqhQjM17 sent by phone or by e-mail, in accordance with the biosafety requirements. The instrument consisted of a questionnaire that included the sociodemographic characterization of participants and a semi-structured questionnaire to assess work-related violence.

The instrument was validated for the Brazilian context in 2015, based on the model of the World Health Organization[11]. The collection referred to the last twelve months of work in the health unit, which may have introduced a memory bias, especially for the oldest and less serious incidents. To minimize this bias, the instrument was divided into sections that address different types of violence, from verbal abuse to physical and/or sexual violence.

The five sections of the instrument are: 1) physical violence in the workplace; 2) verbal abuse in the workplace; 3) sexual harassment in the workplace; 4) other types of violence in the workplace reported by the worker; and 5) prevention and reduction of violence in the workplace [9].

The instrument sought to identify variables such as: number of times the professional suffered violence; profession of the aggressor, sex of the aggressor in relation to the victim; place of the incident; continuity of work after the event; whether the professional received assistance; if there was record of the incident; shift in which it occurred; if the worker was a witness of violence against co-workers and, if so, what was felt; among other relevant variables [9].

The quantitative data were organized in Excel® spreadsheet, version and the analysis was performed with the use of tabular representation, consisting of absolute and relative frequency, with its respective 95% confidence interval.

To verify possible associations between the study variables, the Chi-square, Chi-square test for trend and Fisher's exact test were used. In order to control the confounding and/or effect-modifying variables, Cox's regression (with a time equal to one unit) was used, having first selected the variables with significance < 20%, and then other independent variables until no longer being possible to increase the model accuracy significantly (Forward Stepwise selection). The significance level adopted was 5%. The statistical programs Epi-infoTM 7.2.4 were used for the sample calculation (Statcalc) and for univariate and bivariate analysis, and Bio Estat 5.3 for multivariate analysis.

The study was developed in accordance with the recommendation of the Resolution n. 466/2012 of the National Research Ethics Committee and its project was approved by the Ethics Committee of the Federal University of Mato Grosso do Sul (Opinion n. 4.041.407 and CAAE: 28384619.2.0000.0021).

RESULTS

The study included 174 health professionals, with the following sociodemographic characteristics: higher prevalence of females (73.6%), predominance in the age group of 26 to 45 years (70.7%), 63.2% with higher education or graduate school. In addition, 82.2% worked full-time and 60.3% in the BFHU. Although all professionals interacted with patients, 20.7% did not work directly with them. Adults were the most assisted users (94.9%).

Regarding the prevalence of work-related violence during the COVID-19 pandemic, 76.4% of professionals reported having suffered some type of violence. Among them, 95.5% reported verbal violence, 36.9% moral or psychological violence, 19.6% physical violence and 12.8% sexual harassment. Table 1 shows the frequency of violence cases by type, according to the sociodemographic variables of health professionals. When comparing the sexes, there was no difference in the prevalence of verbal, moral/psychological and physical violence. However, the prevalence of sexual harassment was approximately six times higher among women, with 12.5% female victims compared to 2.2% male victims.

In relation to the types of violence presented in Table 1, no significant association was observed between the frequency of violence and age groups or color/ethnicity. However, it is important to highlight the significant percentage of black professionals who reported experiences of violence in all categories. There was also no association between the level of schooling and marital status and prevalence of violence.

Table 1. Number and percentage of health professionals according to sociodemographic data and the occurrence of violence, Campo Grande, MS, 2020 (n=174)

Variable	N	Verbal		Moral Psychological		Physical		Sexual	
		N.	%	N.	%	N.	%	º.	%
Sex									
Female	128	96	75.0	35	27.3	19	14,8	16	12,5
Male	46	31	67.4	14	30.4	7	15,2	1	2,2
P		(1) 0,319		(1) 0.689		(1) 0.951		(2) **0.045**	
Age group									
18 - 25	15	12	80.0	6	40.0	3	20,0	3	20,0
26 - 35	66	48	72.7	18	27.3	6	9,1	6	9,1
36 - 45	57	38	66.7	18	31.6	10	17,5	7	12,3
46 - 55	31	26	83.9	6	19.4	6	19,4	1	3,2
56 - 65	5	3	60.0	1	20.0	1	20,0	0	0,0
P		(3) 0,980		(3) 0.252		(3) 0.349		(3) 0.134	
Color/ ethnicity									
Indigenous	2	2	100.0	0	0.0	0	0,0	0	0,0
Black	20	17	**85.0**	10	**50.0**	6	**30,0**	4	**20,0**
White	72	53	73.6	18	25.0	8	11,1	9	12,5
Brown	71	50	70.4	19	26.8	12	16,9	4	5,6
Yellow	9	5	55.6	2	4.1	0	0,0	0	0,0
***P* (except indigenous)**		(1) 0,426		(1) 0.081		(1) 0.105		(1) 0.152	
Schooling									
Complete elementary school	1	1	100.0	0	0.0	0	0,0	0	0,0
Incomplete high school	3	3	100.0	1	33.3	1	33,3	0	0,0
Complete high school	43	34	79.1	11	25.6	4	9,3	2	4,7
Higher education	17	13	76.5	4	23.5	4	23,5	2	11,8
Complete higher education	55	39	70.9	15	27.3	10	18,2	7	12,7
Graduation	55	37	67.3	18	32.7	7	12,7	6	10,9
P		(3) 0,085		(3) 0.252		(3) 0.349		(3) 0.134	
Marital situation									
Partner	31	24	77.4	10	32.3	5	16,1	5	16,1
Single	42	32	76.2	17	40.5	5	11,9	5	11,9
Married	75	54	72.0	16	21.3	13	17,3	6	8,0
Separated	21	14	66.7	5	23.8	3	14,3	1	4,8
Widowed	5	3	60.0	1	20.0	0	0,0	0	0,0
***p* (except widowed)**		(1) 0,805		(1) 0.144		(1) 0.887		(1) 0.489	

Note: to meet the requirements for calculating the chi-square, categories with smaller n were removed when necessary. $p \leq 0.05$ means a statistically significant difference (in bold). (1) Chi-square test. (2) Fisher's test. (3) Chi-square test for trend.
Source: created by the authors.

Additionally, there was no association between the occurrence of verbal, moral/psychological, physical and sexual violence and the professional variables (profession, time of occupation, time in current job and professional category). However, there was a higher prevalence of physical violence (32.2%) among those who remained in the unit part-time. The occurrences of moral/psychological and physical violence were more frequent (40.0%) in CAPS (Table 2).

Table 2. Number and percentage of health professionals according to professional data and the occurrence or not of violence, Campo Grande, MS, 2020 (n=174)

Variables	N	Verbal		Moral Psychological		Physical		Sexual	
		N.	%	N.	%	N.	%	N.	%
Profession									
Elementary level (1)	1	1	100.0	0	0.0	0	0.0	0	0.0

Technical level [2]	98	71	72.4	23	23.5	15	15.3	7	7.1
Higher level [3]	75	55	73.3	26	34.7	11	14.7	10	13.3
P		[4] 0,823		[4] 0.220		[4] 0.909		[4] 0.376	
Occupation time									
1<= year	27	19	70.4	7	25.9	2	7.4	3	11.1
> 1 year <= 5 years	38	26	68.4	12	31.6	7	18.4	6	15.8
> 5 years <= 10 years	47	37	78.7	16	34.0	5	10.6	4	8.5
> 10 years <= 20 years	48	34	70.8	11	22.9	10	20.8	3	6.3
> 20 years	14	11	78.6	3	21.4	2	14.3	1	7.1
P		[5] 0,599		[5] 0.526		[5] 0.337		[5] 0.599	
Time in current job									
<= 1 year	57	41	71.9	13	22.8	7	12.3	6	10.5
1 > year <= 5 years	44	25	56.8	12	27.3	5	11.4	6	13.6
> 5 years <= 10 years	48	41	85.4	18	37.5	7	14.6	3	6.3
> 10 years <= 20 years	21	16	76.2	5	23.8	6	28.6	2	9.5
> 20 years	4	4	100.0	1	25.0	1	25.0	0	0.0
P		[5] 0.085		[5] 0.417		[5] 0.112		[5] 0.434	
Professional category									
Chief/leader/Manager/director	23	21	91.3	5	21.7	6	26,1	4	17,4
Administrative	47	36	76.6	13	27.7	6	12,8	6	12,8
Assistance	130	90	69.2	39	30.0	19	14,6	10	7,7
P		[4] 0.075		[4] 0.713		[4] 0.314		[4] 0.277	
Permanence in the unit									
Part time	31	23	74.2	11	35.5	10	32,2	3	9,7
Full time	143	104	72.7	38	26.6	16	11,2	14	9,8
P		[4] 0.868		[4] 0.317		[6] **0.009**		[6] 1.000	
Place of work									
ECU	18	16	88.9	4	22.2	5	27,8	1	5,6
BFHU	105	77	73.3	33	31.4	10	9,5	10	9,5
CAPS	10	7	70.0	4	40.0	4	40,0	2	20,0
BHU	41	27	65.9	8	19.5	7	17,1	4	9,8
P		[4] 0.331		[4] **<0.001**		[4] **0.020**		[4] 0.669	

Note: $p \leq 0.05$ means statistically significant difference (in bold). (1) Nursing assistant. (2) Community Health Agent, administrative, oral health assistant, nursing technician, civil guard. (3) Social worker, nurse, pharmacist, speech therapist, physician, dentist, psychologist, health unit manager. (4) Chi-square test. (5) Chi-square test for trend. (6) Fisher's test.
Source: created by the authors.

Table 3 shows the results of the multivariate analysis. No variable presented a statistically significant association with the occurrence of verbal violence. This may be due to the high frequency of this type of violence in all categories of study variables, generally. The marital situation was associated with the occurrence of moral/psychological violence (Table 3), which had not been observed in the bivariate analysis (Table 1). Single professionals and with partner (without civil marriage) suffered a higher percentage of this type of violence. There was no association with the workplace as had been observed in the bivariate analysis.

Table 3. Association between study variables and the occurrence or not of violence, Campo Grande, MS, 2020

Variables	Verbal	Moral Psychological	Physical	Sexual
Age group	0.930	0.668	0.732	0.310
Sex	0.649	0.902	0.949	**0.049**
Marital situation	0.366	**0.041**	0.512	0.189
Color/ethnicity	0.824	0.542	0.087	0.866
Schooling	0.451	0.276	0.845	0.318
Workplace	0.430	0.491	0.277	0.372
Occupation time	0.480	0.144	0.579	0.954
Professional category	0.254	0.577	0.067	0.124
Permanence in the unit	0.763	0.560	**0.004**	0.443

Note: Cox regression with forward stepwise selection of independent variables.
Source: created by the authors.

In relation to physical violence (Table 3), there was an association with the permanence in the unit. Using bivariate analysis (Table 1), there was a higher frequency of cases of physical violence for professionals who worked part-time, which are mainly the professionals in the assistance category.

There was an association between the sex of the health professional and the occurrence of sexual harassment (Table 3) in the bivariate and multivariate analysis, with victims being predominantly female.

The main consequences for those who suffered verbal violence were the following: stress, irritation, loss of concentration and feelings of anger (81.9%). Of the professionals who suffered some kind of violence, 79.5% reported that there was no record of the incident. Of those who registered, 42.3% made police reports. The majority (98.4%) of professionals continued working and did not receive psychological help (87.4%). There was no consequence for 86.6% of the aggressors.

Of the total number of professionals, 47.1% have witnessed verbal violence twice or more and 17.3% once, 88.4% felt impotence, injustice and mental health damage.

DISCUSSION

In the present study, the prevalence of professionals who reported having suffered one or more types of violence at the workplace was 76.4%, with a predominance of verbal violence followed by moral or psychological violence. Studies conducted in several localities corroborate that verbal aggression is the most frequent type of violence among health professionals, in line with the results found in this study[6,10-12].

In Brazil, a study conducted with 267 nursing professionals showed that 61.6% had suffered verbal abuse, physical violence or sexual harassment at work in the last 12 months, with verbal aggression being the most reported [6]. In Norway, at an emergency primary health care service, the most frequent aggressive behavior reported was verbal aggression (79%), usually caused by waiting time at the clinic[10].

During the first year of the COVID-19 pandemic, in the United States, 44.4% and 67.8% of nurses reported having suffered physical violence and verbal abuse, respectively. Moreover, it was observed that professionals who provided direct care to patients with COVID-19 suffered more verbal violence, results that are similar to our findings[11].

This high prevalence was also observed in a study with medical professionals in Peru, in which 84.5% of participants reported having suffered violence at the workplace when assisting COVID-19 patients, and, in 97.6% of cases, the form of aggression was non-physical, with a predominance of verbal violence[12].

There are possible explanations for the increase in violence at the workplace during the COVID-19 pandemic. One of the factors may have been the restriction or prohibition of visits to health facilities, which may have led patients to express their anxieties and frustrations to health professionals through acts of violence[13].

Furthermore, the work environment has become more stressful and tiring due to the mismatch between the number of available professionals and the demand from patients. Work requirements, such as the constant use of personal protective equipment, may also have contributed to increasing the vulnerability of professionals to violence at work[14].

The findings of this study indicate that, when comparing the sexes, there was no difference in the prevalence of verbal, moral/psychological and physical violence. However, there was an association between the sex of the health professional and the occurrence of sexual harassment in both bivariate and multivariate analysis, in which the prevalence of sexual harassment was approximately six times higher among women compared to men.

Studies have indicated that women are victims of all forms of violence in a higher proportion than men. These results are corroborated by a survey conducted in the same municipality with nursing professionals working in emergency services, which highlighted that women suffered 5.83 times more verbal violence than men[15].

When describing the characteristics of aggressive incidents in primary emergency health care in Norway, the authors corroborate the findings of this study, highlighting the high prevalence of incidents among women (71.5%) and younger health professionals (44.4%), with a mean age of 34.1 years[10].

In a study conducted in the Czech Republic with health professionals, women reported more frequent experiences of stigmatization, discrimination or violence than men, being this finding, according to the authors, explained possibly by the fact that women constitute an oppressed group with less power and prestige than men[7]. This condition has been built and perpetuated over time, shaping social norms that favor the perpetuation of situations of violence and harassment against them [1].

Thus, it is important to highlight the gender violence found in this research, manifested in various forms and especially sexual harassment. In a study conducted in Brazil with nursing professionals, all cases of sexual harassment reported at the workplace were practiced against women and mostly practiced by men[6].

In a study on the factors that led to increased sexual harassment at work during the COVID-19 pandemic, the research showed that oppression of female bodies, a structural feature of society, intensified as women began to occupy more public space, especially at work. In this context, gender inequality remained striking. Sexual harassment in the workplace, as a reflection of this inequality, intensified during the pandemic, showing how women are affected unequally. This phenomenon was driven by patriarchy, gender inequality and the new working conditions imposed by the pandemic[16].

When performing associations between the types of violence and color/ethnicity, although there is no statistically significant difference in the sample studied in multivariate analysis, it is important to highlight the expressive percentage presented by black professionals in all types of violence. The study conducted on predictors of violence during the COVID-19 pandemic in Brazil did not find a statistical association between color/ethnicity and exposure to violence. It is worth noting that the majority of study participants were white (79.6%) [5]. It is crucial to understand that the professional trajectories are shaped by the historical racial and sexual division of work in Brazil, since racism and sexism are expressed in the differences in working conditions faced by health professionals[17].

A research aimed at elucidating bullying highlights the gap of studies that investigate the intersection between violence in the workplace and the skin color of individuals. This argument reinforces the relevance of understanding how different groups such as black, brown and white are impacted in distinct ways by violence in the workplace[18].

The multivariate analysis also revealed a significant association between the marital situation and the incidence of moral/psychological violence, highlighting that single health professionals and with partner (without civil marriage) had a higher proportion of experiencing this violence. A study in Nepal showed that single or unmarried interviewees were 1,814 times more likely to experience verbal violence and 2,476 times more likely to be victims of bullying. The vulnerability of single respondents may be related to less work experience, inability to deal with stressful situations, long hours and shift work[8].

Similarly, a survey conducted in Malaysia indicated that 53.8% of single nurses are at greater risk of violence at work compared to 41.5% of married ones. The study also revealed that younger professionals (under 30) are twice as likely to experience violence, which can be attributed to lack of work experience and less qualified education. In addition, the single condition may be associated with a lower age, thus increasing vulnerability[19].

Another significant association found in this study, both in the bivariate and multivariate analysis, refers to the variable "permanence in the unit". There was a higher prevalence of physical violence among professionals working part-time, compared to those working full-time. This result may be related to the characteristics of the places of care in this study, since ECU, RHC and CAPS have professionals who work part-time, most of whom are directly involved in patient assistance. Nurses, nursing technicians, psychologists and social workers who work part-time were the main victims of physical aggression in this study.

Studies in different countries and contexts have shown that there is an association between the shift of work and the occurrence of physical violence, and that these characteristics are related to the place, type of care, patient profile and management of services, mainly in the urgency and emergency units[19-20].

A study conducted in Malaysia found that the majority of violence incidents occurred during the

day shifts, with 121 cases (67.3%) reported, compared to 59 cases (32.8%) on the night shifts. This pattern can be explained by the greater volume of activities and technical procedures performed during the day, while at night, patients' rest and restrictions on access to family members reduce violence situations[19].

Nevertheless, a study conducted in Iran with emergency nurses indicated that the majority of cases of physical violence (57%) occurred during night shifts, possibly due to the increase in the number of patients referred to emergency rooms and the absence of a management team at that time[20].

The results related to variables of workplace and exposure to violence showed a significant association in bivariate analysis. This is an important association, although it has not been maintained in multivariate analysis. In this study, CAPS professionals were victims of a higher proportion of physical aggressions.

Mental health professionals are more vulnerable to violence in the workplace due to heavy clinical work, low doctor-patient ratio and stressful work environments[21]. A systematic review of the literature on the prevalence of violence in health services showed that, of 331,544 participants, 61.9% reported exposure to violence in the workplace. It also showed a high prevalence of violence in the emergency and psychiatric sectors, with nurses and doctors being the most affected professional categories[22].

In this study, the main consequences of verbal aggression reported were stress, irritation, loss of concentration and anger (81.9%). Other authors also observed that, in addition to anxiety, irritability and anger, fear, shock, confusion, mistrust, dissatisfaction with work, emotional exhaustion, depression, depersonalization and higher levels of burnout were reported[5,7,19,21,23].

A meta-analysis identified that psychological violence at work during the pandemic caused several impacts on the mental and physical health of health professionals. The most common consequences include anger, stress, disappointment, fear, anxiety, depression, low self-esteem, emotional disturbances, sleep problems and impairment of general mental health. Moreover, physical injuries such as musculoskeletal trauma, severe injuries and fractures, as well as long-term health deficits were reported. In more severe cases, psychological violence was associated with the development of severe depressive episodes among health professionals[24].

In this context, strategies to mitigate the impacts on mental health during the pandemic were crucial. A study with Brazilian nursing professionals highlighted institutional measures, such as team reorganization, hybrid work and psychological support, in addition to tactics like sharing fears among colleagues. Individually, the professionals adopted healthy habits, religious support and simple activities such as caring for plants, hiking and watching movies. These practices have proven effective in mitigating the effects of the pandemic and serve as a reference for future challenges[25].

The underreporting of incidents of violence was evident in this study, with 79.5% not registered. Research in China with doctors, nurses and administrators has shown that physical violence is seriously underreported, while perpetrators often remain unpunished[26]. This is attributed to the ineffective application of laws against violence in the health sector and insufficient organizational support to encourage reporting[26].

In the USA, during the COVID-19 pandemic, about 10% of nurses reported greater difficulty in reporting incidents of violence, aggravated by overwork, absence of standardized processes and belief that violence is inherent to the profession. Many justified the violence as a result of patient frustration, making it even more difficult to record[13]. Effective prevention of work-related violence depends on early reporting and analysis of incidents[11].

In Brazil, the notification of violence related to work is mandatory through the Notifiable Diseases Information System (SINAN). However, researches that analyze these data are still limited in the country, which highlights the need for greater attention by health surveillance[27].

It is also crucial to investigate and estimate other types of underreporting, such as unreported cases in police stations or outside the care network, to better understand the magnitude of violence. With detailed and accessible information, it will be possible to implement more precise and targeted strategies for the fight

against and prevention of violence in various spheres of society[28].

Study limitations

One of the study limitations concern the low initial adherence to research by professionals. This may have occurred because the survey was conducted during the COVID-19 pandemic, in which many professionals signaled they were overburdened.

Nevertheless, the quota of participants was reached, established in a sample calculation. Furthermore, the transversal nature depicts a point context experienced by participants at a given time, and this method limited to infer any cause-effect relationships, since it only established associations.

Another limitation is that the sample was selected by a non-probabilistic technique by quotas, in which professionals were included based on availability and acceptance to participate, without random drawing. This may have introduced a selection bias, limiting the representativeness of the sample and affecting the generalization of results for the entire population of health professionals in the municipality.

CONCLUSION

The prevalence of work-related violence among health professionals during the COVID-19 pandemic was worrying, with 76.4% of participants reporting different forms of aggression, mainly verbal and moral/psychological. The analysis revealed significant associations between sexual harassment and female sex, moral/psychological violence and marital status, in addition to the relationship between time spent in the unit and physical aggressions.

Black professionals faced all types of violence addressed in the study, and the CAPS professional team reported a higher incidence of physical aggression. These findings highlight the magnitude and complexity of violence in the workplace, especially in a context of global health crisis, and point to the urgent need for policies of protection and awareness, as well as strategies for notification and coping with this problem.

The implications of this study highlight the need to promote a safe and healthy work environment, reducing work-related violence, particularly in unexpected situations such as the pandemic. To move in this direction, it is essential to implement strategies for preventing violence, considering that most cases remain underreported. It is suggested the adoption of initiatives that encourage a culture of non-violence, education about what constitutes violence and its various manifestations, and the standardization of incident reports as ways to address and mitigate this serious problem..

PREVALÊNCIA DA VIOLÊNCIA CONTRA PROFISSIONAIS DE SAÚDE DURANTE A PANDEMIA DE COVID-19

RESUMO

Objetivo: Identificar a prevalência da violência relacionada ao trabalho entre profissionais de saúde durante a COVID-19. **Métodos**: Estudo transversal analítico realizado em 36 unidades de saúde, entre outubro e dezembro de 2020, com 174 profissionais. A coleta de dados foi feita por meio de um questionário semiestruturado disponibilizado via Google Formulários, contendo dados sociodemográficos e questões sobre violência no trabalho. A análise estatística utilizou a regressão de Cox. **Resultados**: A prevalência de violência foi de 76,4%, com predominância da violência verbal (95,5%), seguida da moral/psicológica (36,9%) violência física (19,6%) e assédio sexual (12,8%). Foram encontradas associações significativas entre assédio sexual e sexo, violência moral/psicológica e situação conjugal, e agressão física e tempo de permanência na unidade. A subnotificação foi de 79,5%. **Conclusão:** A violência no trabalho durante a pandemia mostrou-se preocupante, com impactos na saúde dos profissionais. Estratégias preventivas e melhorias nos mecanismos de notificação são essenciais para enfrentar este problema.

Palavras-chave: Violência no trabalho. Saúde ocupacional. Profissional de saúde. COVID-19.

PREVALENCIA DE VIOLENCIA CONTRA LOS PROFESIONALES DE LA SALUD DURANTE LA PANDEMIA COVID-19

RESUMEN

Objetivo: identificar la prevalencia de violencia laboral entre los profesionales de la salud durante COVID-19. **Métodos**: estudio transversal analítico realizado en 36 unidades de salud, entre octubre y diciembre de 2020, con 174 profesionales. La recolección de datos se realizó por medio de un cuestionario semiestructurado disponible a través de *Google Forms*, conteniendo datos sociodemográficos y preguntas sobre violencia en el trabajo. El análisis estadístico utilizó la regresión de Cox. **Resultados**: la prevalencia de violencia fue de 76,4%, con predominio de violencia verbal (95,5%), seguida de violencia moral/psicológica (36,9%) violencia física (19,6%) y acoso sexual (12,8%). Se encontraron asociaciones significativas entre acoso sexual y sexo; violencia moral/psicológica y situación conyugal; y agresión física y tiempo de permanencia en la unidad. La subnotificación fue de 79,5%. **Conclusión**: la violencia en el trabajo durante la pandemia se mostró preocupante, con impactos en la salud de los profesionales. Las estrategias preventivas y mejorías en los mecanismos de notificación son esenciales para enfrentar este problema.

Palabras clave: Violencia en el trabajo. Salud ocupacional. Profesional de la salud. COVID-19.

REFERENCES

1. Garcia V, Reif L. Relatório de resultados da pesquisa setor saúde: Violência e assédio no mundo do trabalho com uma perspectiva de gênero. Casos do Brasil, Colômbia, El Salvador e Peru. Internacional de Serviços Públicos; 2021 [citado em 12 dez 2023]. Disponível em: https://pop-umbrella.s3.amazonaws.com/uploads/6ce8322e-2881-4133-9503-fcddb5035d72_Viol__ncia_e_ass__dio_no_mundo_do_trabalho_com_uma_perspectiva_de_g__nero._Casos_do_Brasil__Chile__Col__mbia__El_Salvador_e_Peru.pdf

2. Bhatti OA, Rauf H, Aziz N, Martins RS, Khan JA. Violence against healthcare workers during the COVID-19 pandemic: A review of incidents from a lower-middle-income country. Ann Glob Health. 2021;87(1):41, 1–11. DOI: https://doi.org/10.5334/aogh.3203

3. International Labour Organization (ILO). C190: Violence and harassment convention. C190, Genebra [online]. 2019. [citado em 10 nov 2023]. Disponível em: https://www.ilo.org/wcmsp5/groups/public/---europe/---ro-geneva/---ilo-lisbon/documents/genericdocument/wcms_729459.pdf

4. Antão HS, Sacadura-Leite E, Manzano MJ, Pinote S, Serranheira RR, Sousa-Uva FA. Workplace violence in healthcare: a single-center study on causes, consequences and prevention strategies. Acta Med Port. 2020;33(1):31-37. DOI: https://doi.org/10.20344/amp.11465

5. Bitencourt MR, Alarcão ACJ, Silva LL, Dutra AC, Caruzzo NM, Roszkowski I, et al. Predictors of violence against health professionals during the COVID-19 pandemic in Brazil: a cross-sectional study. PLoS ONE. 2021;16(6):e0253398. DOI: https://doi.org/10.1371/journal.pone.0253398

6. Bordignon M, Monteiro MI. Analysis of workplace violence against nursing professionals and possibilities for prevention. Rev Gaúcha Enferm. 2021;42: e20190406. DOI: https://doi.org/10.1590/1983-1447.2021.20190406

7. Janoušková M, Pekara J, Kučera M, Kearns PB, Šeblová J, Wolfová K, et al. Experiences of stigma, discrimination and violence and their impact on the mental health of health care workers during the COVID-19 pandemic. Sci Rep. 2024;14(1):10534. DOI: https://doi.org/10.1038/s41598-024-59700-5

8. Bhusal A, Adhikari A, Singh Pradhan PM. Workplace violence and its associated factors among health care workers of a tertiary hospital in Kathmandu, Nepal. PLoS One. 2023;18(7): e0288680. DOI: https://doi.org/10.1371/journal.pone.0288680

9. Bordignon M, Monteiro MI. Apparent validity of a questionnaire to assess workplace violence. Acta Paul Enferm. 2015;28(6):601-608. DOI: http://dx.doi.org/10.1590/1982-0194201500098

10. Johnsen GE, Morken T, Baste V, Rypdal K, Palmstierna T, Johansen IH. Characteristics of aggressive incidents in emergency primary health care described by the Staff Observation Aggression Scale – Revised Emergency (SOAS-RE). BMC Health Serv Res. 2020;20(33). DOI: https://doi.org/10.1186/s12913-019-4856-9

11. Byon HD, Sagherian K, Kim Y, Lipscomb J, Crandall M, Steege L. Nurses' Experience With Type II Workplace Violence and Underreporting During the COVID-19 Pandemic. Workplace Health Saf. 2021;3:21650799211031233. DOI: https://doi.org/10.1177/21650799211031233

12.Carpio-Toia AMd, Carpio LBMd, Percy M-T, Alarcón-Yaquetto DE, Málaga G. Workplace violence against physicians treating COVID-19 patients in Peru: A cross-sectional study. Jt Comm J Qual Patient Saf. 2021;47(10):637-645. DOI: https://doi.org/10.1016/j.jcjq.2021.06.002

13. Virani AK, Puls HT, Mitsos R, Longstaff H, Goldman RD, Lantos JD. Benefits and risks of visitor restrictions for hospitalized children during the COVID pandemic. Pediatrics. 2020;146(2):e2020000786. DOI: https://doi.org/10.1542/peds.2020-000786

14. Maben J, Bridges J. COVID-19: Supporting nurses' psychological and mental health. J Clin Nurs. 2020;29(15–16):2742–2750. DOI: https://doi.org/10.1111/jocn.15307

15. Ceballos JB, Frota OP, Nunes HFSS, Ávalos PL, Krügel CdC, Júnior MAF, et al. Physical violence and verbal abuse against nurses working with risk stratification: characteristics, related factors, and consequences Rev Bras Enferm. 2020;73(Suppl 5):e20190882. DOI: https://doi.org/10.1590/0034-7167-2019-0882

16. Sá Neto CE. Sexual harassment in the workplace in the context of the COVID-19 pandemic: reflections on gender inequalities at work from the paradigm of relational justice. Seqüência: Estudos jurídicos e políticos. 2023;44(94):e91417. DOI: https://doi.org/10.5007/2177-7055.2023.e91417

17. Dias CAO, Andrade CB. Branquitude e o cuidado em saúde. Interface. 2023;27:e220370. DOI: https://doi.org/10.1590/interface.220370

18. Andrade CB, Assis SG. Assédio moral no trabalho, gênero, raça e poder: revisão de literatura. Rev Bras Saude Ocup. 2018;43:e11. DOI: https://doi.org/10.1590/2317-6369000012917

19.Ismail, HB, Ahmad, SH, Abdullah, M, Zainal, M, Omar, Z, Lim, SL. Workplace violence among nurses in a Penang hospital: Prevalence and risk factors. Med J Malaysia, 2022 [cited 2023 Feb 10]. Available from: https://www.e-mjm.org/2022/v77n6/workplace-violence.pdf

20. Janatolmakan M, Abdi A, Rezaeian S, Framarzi Nasab N, Khatony A. Violence against emergency nurses in Kermanshah-Iran: Prevalence and associated factors. Younas A, editor. Nurs Res Pract. 2023 Jan 13;2023:1–8. DOI: https://doi.org/10.1155/2023/36687388

21. Xie XM, Zhao YJ, An FR, Zhang QE, Yu HY, Yuan Z, et al. Workplace violence and its association with quality of life among mental health professionals in China during the COVID-19 pandemic. J Psychiatr Res. 2021;135:289-93. DOI: https://doi.org/10.1016/j.jpsychires.2021.01.023

22. Liu J, Gan Y, Jiang H, Li L, Dwyer R, Lu K, et al. Prevalence of workplace violence against healthcare workers: a systematic review and meta-analysis. Occup Environ Med. 2019; 76(12):927-37. DOI: https://doi.org/10.1136/oemed-2019-105849

23. Wang W, Lu L, Kelifa MM, Yu Y, He A, Cao N, et al. Mental

health problems in Chinese healthcare workers exposed to workplace violence during the COVID-19 outbreak: a cross-sectional study using propensity score matching analysis. Risk Manag Healthc Policy. 2020;13:2827-2833. DOI: https://doi.org/10.2147/RMHP.S279170

24.Ajuwa MP, Veyrier CA, Cousin Cabrolier L, Chassany O, Marcellin F, Yaya I, et al. Workplace violence against female healthcare workers: a systematic review and meta-analysis. BMJ Open. 2024 Aug 28;14(8):e079396. DOI: https://doi.org/10.1136/bmjopen-2023-079396

25. Santos LH dos, Kantorski LP, Treichel CA dos S, Menezes ES de, Silva P dos S da, Oliveria MM de, et al. Daily life of nursing professionals in the covid-19 pandemic: invention of life and work. Cienc Cuid Saude. 2024;23:e66847. DOI: https://doi.org/10.4025/ciencuidsaude.v23i0.66847

26. Yang SZ, Wu D, Wang N. Workplace violence and its aftermath in China's health sector: implications from a cross-sectional survey across three tiers of the health system. BMJ Open. 2019;9:e031513. DOI: http://dx.doi.org/10.1136/bmjopen-2019-031513

27. Pintor EAS, Garbin AC de. Work-related violence registries and worker's health surveillance: breaking invisibility. Rev Bras Saude Ocup. 2019;44:e20. DOI: https://doi.org/10.1590/2317-6369000006918

28.Vasconcelos NM, Bernal RTI, Souza JB, Bordoni PHC, Stein C, Coll CVN, et al. Underreporting of violence against women: an analysis of two data sources. Ciênc Saúde Colet. 2024;29(10):1-9. DOI: https://doi.org/10.1590/1413-812320242910.07732023

Corresponding author: Josyenne Assis Rodrigues. Rua Fernandes da Fonseca, 1001, Vila Santo Eugênio, Campo Grande, MS, Brasil. CEP: 79060570. E-mail: josyennerodrigues@hotmail.com

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