

Predictors burden in mental health workers during the COVID-19 pandemic

Preditores de sobrecarga dos trabalhadores de saúde mental durante a pandemia de COVID-19

Predictores de sobrecarga de trabajadores de salud mental durante la pandemia de COVID-19

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ABSTRACT

Objectives: to analyze burden predictors in mental health workers during the COVID-19 pandemic. **Methods:** a quantitative study, collected between October and December 2020 through a sociodemographic questionnaire and Mental Health Service Burden Assessment Scale, in four services in a municipality in the state of São Paulo, Brazil, with 108 workers. Descriptive analysis and multiple linear regression of ordinary least squares were performed, in search of predictors for variation in the scale score. **Results:** it showed median work burden (2.03). Predictors: psychological or psychiatric follow-up; normal performance of activities during the pandemic; direct action with suspected or confirmed cases of COVID-19; and belonging to the risk group (people over 60 years of age, diabetics, hypertensive, cardiac, respiratory problems) ($p < 0.05$). **Conclusions:** working conditions observed during the pandemic, simultaneously with workers' mental health care needs predict burden at work in health. **Descriptors:** Mental Health; Health Personnel; Mental Health Services; Burnout, Professional; COVID-19.

RESUMO

Objetivos: analisar os preditores de sobrecarga dos trabalhadores de saúde mental durante a pandemia de COVID-19. **Métodos:** estudo quantitativo, coletado entre outubro e dezembro de 2020 por meio de questionário sociodemográfico e Escala de Avaliação da Sobrecarga de Profissionais em Serviços de Saúde Mental, em quatro serviços de um município do estado de São Paulo, Brasil, com 108 trabalhadores. Realizou-se análise descritiva e regressão linear múltipla de mínimos quadrados ordinários, em busca de preditores para a variação no escore da escala. **Resultados:** evidenciou-se mediana sobrecarga de trabalho (2,03). Preditores: acompanhamento psicológico ou psiquiátrico; desempenho normal das atividades durante a pandemia; atuação direta com casos suspeitos ou confirmados de COVID-19; e pertencer ao grupo de risco (pessoas acima de 60 anos, diabéticos, hipertensos, cardiopatas, problemas respiratórios) ($p < 0,05$). **Conclusões:** condições de trabalho observadas durante a pandemia, simultaneamente com necessidades de cuidado à saúde mental dos trabalhadores, predizem sobrecarga no trabalho em saúde.

Descritores: Saúde Mental; Pessoal de Saúde; Serviços de Saúde Mental; Esgotamento Profissional; COVID-19.

RESUMEN

Objetivos: analizar los predictores de sobrecarga del trabajador de salud mental durante la pandemia de COVID-19. **Métodos:** estudio cuantitativo, recolectado entre octubre y diciembre de 2020 a través de un cuestionario sociodemográfico y la Escala de Evaluación de la Carga de los Profesionales en Servicios de Salud Mental, en cuatro servicios de un municipio del estado de São Paulo, Brasil, con 108 trabajadores. Se realizó análisis descriptivo y regresión lineal múltiple por mínimos cuadrados ordinarios, en busca de predictores para la variación en el puntaje de la escala. **Resultados:** hubo mediana sobrecarga de trabajo (2,03). Predictores: seguimiento psicológico o psiquiátrico; normal desempeño de actividades durante la pandemia; actuación directa con casos sospechosos o confirmados de COVID-19; y pertenecer al grupo de riesgo (personas mayores de 60 años, diabéticos, hipertensos, cardíacos, respiratorios) ($p < 0,05$). **Conclusiones:** las condiciones de trabajo observadas durante la pandemia, simultáneamente con las necesidades de atención a la salud mental de los trabajadores, predicen sobrecarga laboral en salud.

Descriptor: Salud Mental; Personal de Salud; Servicios de Salud Mental; Agotamiento Profesional; COVID-19.

INTRODUCTION

The new coronavirus disease (COVID-19) pandemic, experienced almost two years ago, began in Wuhan, China, at the end of 2019, and spread rapidly to other countries, constituting a public health emergency, declared by the World Health Organization (WHO), in January 2020⁽¹⁾. In March 2020, WHO declared such an emergency as a pandemic, due to the accelerated spread of the disease in 114 countries and a high number of cases and deaths⁽²⁾.

Protective measures were implemented in order to control the COVID-19 pandemic outbreak. Social distancing, suspension of face-to-face educational activity and commercial service, except those considered essential, cessation of cultural, ceremonial (civil and/or religious) activities, and limitation of free movement, avoiding crowds of people can be cited. For activities that continued to operate, the importance of keeping a distance of at least one meter between one person and another was highlighted, in addition to other essential preventive measures such as the use of masks, continuous disinfection of environments and hand hygiene⁽²⁾.

This scenario results both physical and psychological results associated with being affected by the COVID-19 pandemic and the changes in this period, including prevention measures and socioeconomic impact.

There are different studies, carried out at similar times in the past, related to the consequences on mental health during an epidemic, highlighting the psychological effects of quarantine, isolation and social distancing in the population, and may be presented at higher levels in specific populations, for example, older adults and health professionals^(1,3).

Research on Severe Acute Respiratory Syndrome (SARS), swine flu (H1N1), Middle East Respiratory Syndrome (MERS), Ebola epidemics/pandemics, and during the first year of COVID-19, indicate that quarantine as a preventive measure is associated with symptoms of depression, anxiety, stress, post-traumatic stress disorder (PTSD), anger and psychological distress⁽²⁾.

Health service workers, in addition to concerns and measures adopted by the population, have the factors in the fight against the COVID-19 pandemic, the fear of infecting their families or self-contaminating, the possible increase in workload and a scenario with numerous deaths, which can lead to complications in mental health. A study points out that, in addition to the elements mentioned above, the lack of training and communication support is also a predisposing factor, especially for the development of anxiety, depression and stress symptoms⁽⁴⁾. In Brazil, pressures normally experienced by nursing professionals, such as double working hours, work violence and low pay, lead to stress and mental illness. The conditions reported are added to difficulties in the face of lack of hospital resources and personal protective equipment (PPE) present at the present time⁽⁵⁾.

Mental health plans for workers resulting from their work in epidemics/syndromes, such as high levels of stress, PTSD, depression, anxiety and burnout syndrome, may persist beyond the stabilization of these public health emergencies⁽⁶⁾. In addition to direct trauma, the article cited above addresses the issue of secondary traumatic stress, also called vicarious trauma,

whose symptoms include loss of appetite, fatigue, irritability, sleep and attention disturbances, physical despondency, fear and despair. In this manifestation, health professionals develop symptoms similar to those of patients due to long exposure⁽⁶⁾.

In Brazil, in mid-2019, the contagion curve continued to increase and the mental health of professionals was not prioritized, in addition to the potential collapse of the health system, which caused these workers to suffer an emotional crisis, highlighting, historically, the existence of few programs of mental health for them⁽⁵⁻⁶⁾. It is important to learn about the matter so that appropriate deliberations are implemented.

A study conducted in 2018 that analyzed professionals' satisfaction and work burden in mental health services in a municipality in the countryside of São Paulo presented good overall satisfaction (4.19) and low overall burden (1.52), which reinforces that professionals with low work burden tend to be more satisfied with employment, which consequently brings a better quality of care to service users⁽⁷⁾.

Another study conducted in February 2011, which investigated stressors, burnout and coping strategies among hospital and community psychiatric nurses in a region of Dublin, points out that nurses worked in a moderately stressful environment, and stressors are concentrated on organizational issues. The main ones are lack of resources, workload and organizational structures/processes. They also reported average levels of emotional exhaustion, low levels of depersonalization, and average levels of personal achievement⁽⁸⁾.

Thus, although the focus of the pandemic is on COVID-19 itself, analyzing forms of transmission, prevention standards and long-term consequences of COVID-19, the present research is justified by the need for attention to the mental health of workers who work in mental health services, in order to know the impacts of experiencing this moment, the following question arises: what are the burden predictors in mental health workers who act in coping with COVID-19?

OBJECTIVES

To analyze burden predictors in mental health workers during the COVID-19 pandemic.

METHODS

Ethical aspects

According to guidelines from the Brazilian National Ethics and Research Commission (CONEP - *Comissão Nacional de Ética e Pesquisa*), the Informed Consent Form (ICF) was presented virtually through Google Forms, on the first page of the data collection instrument. All participants who agreed to participate in the study demonstrated their opinion by recording knowledge about the study procedures and answered yes or no as a criterion for access to the complete form⁽⁹⁾.

This research was approved, under Opinion 4,296,005, by the Research Ethics Committee of *Faculdade de Medicina de Botucatu at Universidade Estadual Paulista "Júlio de Mesquita Filho"*, following the determinations of Resolution 466/12.

Study design, period, and location

This is a descriptive study with a quantitative, exploratory and cross-sectional approach, which sought to analyze burden predictors in mental health service workers during the first year of the COVID-19 pandemic. The study construction was guided by the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) for observational studies in epidemiology.

The research was carried out from October to December 2020 in four mental health services in the city of Botucatu, located in the countryside of the state of São Paulo, Brazil. The services were: two Psychosocial Care Centers (CAPS – *Centros de Atenção Psicossociais*), one type II adult and the other type II alcohol and other drugs; an Acute Inpatient Unit; and an Alcohol and Drug Reference Service.

Sample

Due to the restriction in the total number of workers in the selected services (141), it was decided to include all those aged 18 or over and who had at least six months of work experience, time interval considered by the authors as necessary for adaptation and knowledge of the services' particularities. Those who did not answer the instrument in its entirety were excluded.

Data collection

Initially, contact was established by telephone with the services' coordination, for the scheduling of a meeting in order to present the research proposal. After this first dialogue, the workers' e-mail addresses were collected. Then, workers received an invitation and contact via e-mail, through the contact of one of the researchers. The invitation consisted of a letter explaining the research objective together with the ICF. By accepting participation in the research, they filled out the collection instrument via online form (Google Forms). This was composed of a sociodemographic questionnaire and the Work Impact Assessment Scale on Mental Health Services (IMPACTO-BR).

The sociodemographic questionnaire contained the following variables: where they live; sex; age; race/color; marital status; what is their highest level of education; if they have a graduate degree; in which unit they work; how long have they been working in this service; profession; wage; whether there was a decrease in family income as a result of the pandemic; workload; job tenure; type of employment relationship; if they have another employment relationship; with whom they live; if there are people from the risk group for COVID-19 in the house in which they reside; if the interviewee is part of the risk group; psychological follow-up in the past and currently; acting in direct contact with suspected and/or confirmed cases of COVID-19; and how are these activities currently in relation to removal, altered function or maintenance of the usual position.

Being part of the risk group indicates belonging to one or more of these aspects: person over 60 years, diabetic, hypertensive, cardiopathic, respiratory problems.

The IMPACTO-BR scale is part of a set of scales for assessing mental health services, elaborated by the WHO Division of

Mental Health, which were validated for Brazil by Bandeira et al.⁽¹⁰⁾. It assesses the burden felt by mental health professionals as a result of daily work with people with mental health problems. The complete questionnaire includes 34 questions, of which only 18 constitute the quantitative questions of the scale itself, assessing the repercussions of work on various aspects of professionals' lives. The response alternatives are arranged in a 5-point Likert scale, where 1 = in no way, 2 = not much, 3 = more or less, 4 = a lot and 5 = extremely. In total factors and global scale, the higher the mean the higher the burden.

The global scale factors are grouped into 3 categories: 1. Effects on physical and mental health – assesses frequency of physical problems, doctor's consultations, medications, effects on emotional stability; 2. Effects on team functioning – is related to the frequency in which they think about changing the field of work, frequency of absences, fear of being assaulted, quality of sleep, health in general; 3. Feeling overwhelmed - feel frustrated, overwhelmed, depressed, tired and stressed by working with mental health problems^(7,11).

Analysis of results, and statistics

Data were analyzed using descriptive statistics (mean, median, standard deviation and 95% confidence interval for the mean for the scale scores), presenting the proportions of categorical variables (absolute and relative frequency), and inferential analysis by multiple linear regression of ordinary least squares, in search of predictors for the variation in the IMPACTO-BR score. The objective of this analysis was to find a model, a set of variables, that explains the dependent variable variation (IMPACTO-BR score).

We consider as reference value for association between variables p-value less than or equal to 0.05. For more robust analysis, we used standard errors that are robust to heteroscedasticity.

RESULTS

Of a total of 141 workers from the four services selected for the development of this research, we had 108 participants, and the 33 absences were due to refusals of participation and work leave. None had less than 6 months of experience.

As for the workers' profile, 93.5% (n=101) lived in the city of Botucatu, 83.3% (n=90) were female, 33.3% (n=36) were aged between 38 and 47 years, 81.5% (n=88) declared themselves white, 52.8% (n=57) reported being married or having a partner. The majority, 30.6% (n=33), had completed graduate studies and worked in the Acute Inpatient Unit (36.1% (n=39)) there is a period between 5 and 10 years (48.9% (n=52)), with monthly income between R\$2,000 (about US\$363.63) and R\$4,000 (about US\$727.27) (64.9% (n=70)), and 35.1% (n=39) had a decrease in family income due to the pandemic.

Regarding employment, 77.8% (n=85) had a work day of 30 hours per week and 25.0% (n=27) reported second bond, and more than half of participants belonged to the nursing team, including 47.1% (n=52) nursing technicians or assistants and 16.6% (n=18) nurses.

Almost 80% (n=85) of workers continued to work in direct contact with suspected and/or confirmed cases of COVID-19

and 95.5% (n=103) had no change of function, rearrangement or removal. Although the majority, 68.5% (n=73), were not part of the risk group for COVID-19, most lived with a person who was part of this group (45% (n=48)). Moreover, 52.3% (n=58) reported that they had already performed or were still performing at the time of research (21.6% (n=23)) some type of psychological and/or psychiatric follow-up.

The descriptive analysis of IMPACTO-BR presented in Table 2 was performed individually for each factor, in order to identify the degree of burden on workers' health and work. The overall score had an average of 2.03 (SD 0.71), indicating a degree of burden between "not much" and "more or less". This result indicates that workers presented median burden rates.

The first factor indicated the lowest degree of burden in the teams of the services studied, with an average of 1.95 (SD 0.84), a result referring to the effects on physical and mental health, and the third factor presented the highest degree of burden with a mean of 2.19 (SD 0.78), a result related to feeling overwhelmed.

When looking for predictors for burden, i.e., variables that are associated with higher burden scores in the IMPACTO-BR global score, we found that workers who undergo psychological or psychiatric follow-up are the ones who feel more burdened, as well as those who are performing the activities normally ($p \leq 0.03$), as shown in Table 3.

In Table 4, when looking for predictors for each factor of the scale, we found that in factor 1, physical and mental health, workers who were part of the risk group felt greater physical and mental health burden ($p \leq 0.03$). In factor 2, burden on team functioning, workers who declared themselves to be black felt less burden ($p \leq 0.04$), while those who worked directly with suspected or confirmed cases of COVID-19 felt more overwhelmed with the team and also with regard to factor 3, feeling overwhelmed ($p \leq 0.03$). Workers who undertook psychiatric and/or psychological follow-up presented significant burden on the three factors ($p < 0.05$).

All variables included in the analyses acted as controls, i.e., we can infer that the variables that presented associations, independent of the controls.

DISCUSSION

This research was carried out during the first year of the COVID-19 pandemic, a period marked by the lack of knowledge of the situation, high rates of contagion and immediate adaptation needs of whole society and health services. In this context, we found that according to IMPACTO-BR global score, mental health service workers report median values of burden. This data is consistent with a cross-sectional study conducted with nurses of different performances, which associated working in the area of mental health with fewer symptoms of depression, anxiety and stress, a factor related to their specialized training, which allows self-awareness as a person and professional, as mentioned by the authors⁽¹²⁾.

The study also shows that people who undergo psychological or psychiatric follow-up showed higher scores of personal and team burden, as well as a greater impact on physical and mental health and on feeling overwhelmed. A cross-sectional study with psychiatric residents conducted at the beginning

of the pandemic in Saudi Arabia shows similar data, in which respondents who received mental health help in the last two years were 6.59 times more likely to suffer exhaustion and depressive symptoms⁽¹³⁾.

Table 1 - Sociodemographic and professional profile of mental health workers of mental health services during the COVID-19 pandemic, Botucatu, São Paulo, Brazil, 2020 (n=108)

Variables (n=108)	Frequencies	
	%	n
Sex		
Female	83.3	90
Male	16.7	18
Age group		
18-27	1.9	2
28-37	24.1	26
38-47	33.3	36
48-57	28.7	31
Over 58	12.0	13
Race/color		
White	81.5	88
Black	13.0	14
Others	5.5	6
Marital status		
Single	23.1	25
Married/with partner	52.8	57
Separated/divorced	19.7	23
Widow	2.8	3
Education		
Elementary school	1.9	2
High school	9.2	10
Vocational school	25.3	27
Higher education	24.1	26
Incomplete higher education	8.3	9
Graduate degree	31.5	34
Service type		
Acute Inpatient Unit	36.1	39
Adult Psychosocial Care Center II	23.1	25
Psychosocial Care Center Alcohol and Drugs II	13.0	14
Alcohol and Drug Reference Service	27.8	30
Professional category		
Doctor	6.5	7
Nurse	16.6	18
Social worker	5.6	6
Psychologist	4.6	5
Nursing technician/assistant	47.1	52
Occupational therapist	3.7	4
Health services assistant	9.3	10
Others	5.4	6
Job tenure		
1-4 years	18.5	19
5-10 years	48.9	52
Over 10 years	34.3	37
Wage range*		
Up to 2 minimum wages	17.6	19
3-4 minimum wages	64.9	70
5-6 minimum wages	18.5	19
There was a decrease in family income		
Yes	35.1	39
No	64.9	69
Another employment relationship		
Yes	25.0	27
No	75.0	81
Weekly workload		
20h	3.7	3
30 h	77.8	85
40 h	6.5	7
Other	12.0	13

*Consider Brazil's minimum wage of 2020 of R\$1,100.00(about US\$200.00).

Table 2 - Descriptive measures of the Work Impact Assessment Scale on Mental Health Services (IMPACTO-BR) scores in mental health workers during the COVID-19 pandemic, Botucatu, São Paulo, Brazil, 2020 (n=108)

Scale factor	Mean	95%CI lower limit	95%CI upper limit	Standard deviation	Minimum	Maximum
GLOBAL IMPACTO-BR	2.03	1.89	2.16	0.71	1.00	4.67
F1- Effects on physical and mental health	1.95	1.78	2.11	0.84	1.00	4.80
F2- Effects on team functioning	2.15	2.01	2.30	0.76	1.00	4.17
F3- Feeling overwhelmed	2.19	2.04	2.34	0.78	1.00	5.00

*95% Confidence Interval.

Table 3 - Multivariate analysis of socioeconomic variables in relation to the Work Impact Assessment Scale on Mental Health Services (IMPACTO-BR) in mental health workers during the COVID-19 pandemic, Botucatu, São Paulo, Brazil, 2020 (n=108)

Variables	β	r ² *(%)	p value
Age group 48 and older	-0.11	-1.18	0.23
Male	-0.09	-1.00	0.31
Black race/color	-0.15	-1.54	0.12
With a partner	-0.07	-0.81	0.41
Higher education	-0.01	-0.09	0.92
Weekly workload	-0.02	-0.24	0.81
Decreased income during the pandemic	0.06	0.71	0.47
Other employment relationship	-0.01	-0.13	0.89
Living with people from the risk group for COVID-19	-0.00	-0.05	0.95
Belonging to the risk group	0.12	1.23	0.22
Performing some type of psychiatric and/or psychological follow-up	0.30	2.99	0.00
Acting in direct contact with suspected and/or confirmed cases of COVID-19	0.21	2.34	0.02
Normally performing work activities	0.20	2.14	0.03

R Square (r²) = coefficient of determination.

Table 4 - Multivariate analysis of socioeconomic variables in relation to the Work Impact Assessment Scale on Mental Health Services (IMPACTO-BR) factors in mental health workers during the COVID-19 pandemic, Botucatu, São Paulo, Brazil, 2020 (n=108)

Variables	Factor 1 Physical and mental burden			Factor 2 Team impact			Factor 3 Feeling overwhelmed		
	β	r ² * (%)	p value	β	r ² * (%)	p value	β	r ² * (%)	p value
Age group 48 and older	-0.09	-0.96	0.33	-0.19	-1.96	0.05	-0.03	-0.28	0.77
Males	-0.09	-1.07	0.28	-0.02	-0.24	0.80	-0.11	-1.11	0.26
Black race/color	-0.12	-1.38	0.17	-0.19	-2.01	0.04	-0.05	-0.55	0.57
With a partner	-0.09	-1.02	0.30	-0.08	-0.88	0.37	-0.00	-0.09	0.92
Higher education	-0.03	-0.30	0.76	0.02	0.22	0.82	-0.04	-0.43	0.66
Weekly workload	-0.00	-0.09	0.92	-0.02	-0.25	0.79	-0.04	-0.38	0.69
Decreased income during the pandemic	0.10	1.17	0.24	0.01	0.19	0.84	0.06	0.62	0.53
Other employment relationship	-0.08	-0.92	0.36	-0.05	-0.52	0.60	0.08	0.84	0.40
Living with people from the risk group for COVID-19	0.01	0.11	0.91	0.02	0.29	0.76	-0.05	-0.53	0.59
Belonging to the risk group	0.22	2.33	0.02	0.07	0.69	0.49	0.02	0.26	0.79
Performing some type of psychiatric and/or psychological follow-up	0.35	3.73	0.00	0.26	2.60	0.01	0.22	2.09	0.03
Acting in direct contact with suspected and/or confirmed cases of COVID-19	0.15	1.83	0.07	0.20	2.22	0.02	0.21	2.17	0.03
Normally performing work activities	0.17	1.96	0.05	0.15	1.61	0.10	0.18	1.85	0.06

R Square (r²) = coefficient of determination.

Another point revealed was that workers who perform activities normally felt more impact on the burden, which can be justified by the fear of contamination from family members and self-contamination, lack of personnel, prolonged use of PPE or lack thereof, frequent changes in protocols and routine, as the literature reveals^(3,14-16). In a reflection on self-care among nursing professionals, a study addresses the issue of long and exhausting working hours, focusing on the predominance of females in the class, as also demonstrated in the present study (83.3% of participants), allocating to women the most household activities⁽¹⁶⁾. The same study points out that the workload added to decrease in time for leisure activities and exposure to risks in the workplaces generate losses in quality of life at work. Other factors capable of influencing burden may include sex-related discrimination, sex

expectations in care delivery, and lack of attention to “double working hours” with high workload at home⁽¹⁷⁻¹⁸⁾.

Regarding physical and mental burden predictors, people in the risk group feel greater physical and mental burden, a fact also evidenced in a literature review in which professionals with chronic diseases had a higher prevalence of anxiety, explained by the greater risk of complications and death related to COVID-19⁽¹⁹⁾.

Analyzing predictors for personal burden and in relation to team and feeling overwhelmed, workers who work directly with suspected or confirmed cases of COVID-19 felt more impact for both. Similar results are found in several studies that assessed higher levels of anxiety, depression and stress, for fear of infecting family members or themselves⁽²⁰⁻²²⁾. Research comparing health

professionals with the general population reveals higher levels of feelings of being overwhelmed, such as anxiety, depression and stress^(20,23).

Another study found high levels of stress in the black and Latino population, It also points out that black and Latino health workers, compared to whites, had fewer burnout symptoms, while they reported greater fear regarding exposure to the virus, and a greater sense of meaning and purpose with work was frequently observed among workers with racial minorities, 68.3% in black people, in addition to low prevalence of feeling of appreciation with work during the pandemic in white workers⁽¹⁸⁾. The results of this research showed that workers who declared themselves black, feel less burden on team functioning.

An analysis of the repercussions of COVID-19 threat perception showed a positive relationship between perception and mental health problems, i.e., a high threat intuition is associated with high scores on somatic symptoms, anxiety, insomnia, depression, and social dysfunction. Thus, confirmed cases of COVID-19 in people close to or in the workers themselves affect the perceived severity and risk, impacting on workers' mental health⁽²³⁾.

As recommendations, scientific literature brings, with regard to the work process: the adoption of six-hour shifts for nurses; division of health teams to care for confirmed or suspected COVID-19 and non-COVID-19 to reduce risk of transmission; training of workers to standardize the work process as well as putting on and taking off PPE⁽¹⁵⁾. Also, according to the authors, regarding mental health workers' mental health, we highlight measures such as the creation of psychological support teams, which includes reception and crisis care, and use of a Psychosocial Care network. Another analysis presents as coping strategies, additional to psychological support, complementary integrative practices, such as yoga, Reiki and relaxation exercises⁽²²⁾.

Evidence shows that regular updates and changes in infection control protocols, despite generating some frustration and exhaustion, reassured workers, for receiving frequent information from the organization regarding updates on COVID-19, how to protect themselves and what to do when exposing themselves, conveying a feeling of support and protection⁽¹⁴⁾.

Study limitations

This study has as limitation its scope, because it analyzed only four services of a municipality. Thus, it is important to develop new studies that address the same concept of professional burden for comparison in other contexts. Another limitation is that data collection was performed online, thus, depending on the access to the technology available to each individual, besides involving

the participants' self-report, response bias becomes possible. We can also mention the fact that it is a cross-sectional study, which makes it impossible to determine the cause-effect relationship.

We did not assess health promotion strategies used by participants, a factor that may interfere with the results. As scientific literature shows, workers who reported spending less time looking for information about COVID-19, who performed rest between work shifts, who had a healthy diet, who verbalized feelings/emotions, and who maintained social connections had fewer symptoms of anxiety, depression and stress⁽¹²⁾.

Contributions to nursing and health

Research on mental health professional burden during the COVID-19 pandemic, a recent theme, is important but scarce. Studies that analyze the burden of workers are good indicators of monitoring workers' health, helping in strategies to face the weaknesses that health services present.

The evidence presented in this research will contribute to literature on mental health workers' mental health during the COVID-19 pandemic, enabling implementing coping strategies that prevent and track professional burden early, in order to promote psychological well-being.

It is necessary to take a closer look at mental health service workers aiming at more effective strategies to work on health prevention and promotion, producing a workforce that can reflect on a better quality in user care. It should be noted that the quality of care for people with mental health problems is a consequence of the care of workers.

CONCLUSIONS

The overall score indicated a median burden grade among mental health workers. Furthermore, when analyzing burden predictors in mental health workers during the COVID-19 pandemic, it was presented as an outcome that those who were under psychological and/or psychiatric follow-up presented more burden in all dimensions analyzed. It is also noteworthy an important burden of workers who did not have changes in working hours, who work directly with positive or suspected cases of COVID-19 and who belong to the risk group, and that working conditions commonly observed in pandemic times, together with workers' mental health care needs predict burden in health work.

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