

Frontline stories: the impacts of Covid-19 pandemic on Healthcare workers and students in Sao Paulo

Relatos da linha de frente: os impactos da pandemia da Covid-19 sobre profissionais e estudantes da Saúde em São Paulo (resumo: p. 18)

Relatos de la línea de frente: los impactos de la pandemia de Covid-19 sobre profesionales y estudiantes de la Salud en São Paulo (resumen: p. 18)

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Brazilian health workers and students must face, added to the coronavirus, the lack of Personal Protective Equipments (PPEs), keeping of same work force in the frontlines, as well as an unstable and uninformative public health policy, contributing to an exhausting endeavor. This research evaluates the effects of the Covid-19 pandemic on the different profiles of healthcare workers and students in the state of São Paulo. The online semi structured validated survey was applied, with quantitative analysis through data processing by STATA 13.0, and qualitative, through content analysis according to Bardin. Our findings corroborate the prevalence of an important overload within the students and healthcare workers, manifested through mood, sleep and cognition alteration, anxiety, physical discomfort, pessimism and increase in nightmares. As a counterpoint to these challenges, the pandemic has brought a powerful learning process, by understanding the need to adapt and the importance of scientific research.

Keywords: Covid-19. Mental health. Healthcare workers. Exhaustion.



Introduction

On March 11, 2020, the World Health Organization (WHO) classified Covid-19 as a pandemic. The organization's director general, Dr. Tedros Adhanom Ghebreyesus, stressed the importance of addressing the current adversity not just as a public health crisis, but as one with repercussions in all sectors¹. The first case of pneumonia caused by the SARS-CoV-2 virus occurred in December 2019 in the city of Wuhan, China. In Brazil, almost three months later, on February 25, 2020, the first case of coronavirus was confirmed, in São Paulo. In the following months, the country presented one of the worst responses to the pandemic in the world², maintaining a high moving average of cases, hospitalizations, and deaths over a long period of time.

By adopting a mindset that denies science and the seriousness of the pandemic for the health and well-being of the population³, the Brazilian federal government failed to coordinate, promote and fund public health measures that are internationally accepted. As a result, after more than a year of the pandemic, Brazil appears as the third country with the third largest absolute number of coronavirus cases registered in the world, and as the second in the ranking of deaths from Covid-19⁴. As of October 8, 2021, 21,550,730 cases and over 600,000 deaths have been reported⁵ due to coronavirus in Brazil.

As if the alarming number of cases and the indifference of the government were not enough, we can add to this landscape a series of other factors that have profoundly altered the daily lives of the population, causing feelings of uncertainty and fear: the spread of false information about the virus on social networks, the lack of effective therapeutic mechanisms^{6,7}, the insufficiency of control mechanisms, the closing of schools and shops, the sudden changes in work and study routines, social distancing on a global scale, and changes in family dynamics⁸.

In this sense, repercussions such as higher levels of stress, anxiety and depression are to be expected and have already been observed in the general population and especially in health workers⁹. Considering the Brazilian context of, where there are also shortage of Personal Protective Equipment (PPE) in several institutions¹⁰ and had a policy of keeping the same professionals since the beginning of the pandemic in March, the overload felt by them was expected to be even greater. Thus, it is essential in the fight against the pandemic, among other measures, to ensure the well-being of health workers¹¹, since stress and dysphoria can greatly impair their work, leading to miscommunication with staff, misconduct, and difficulty in making decisions¹².

Another pertinent question is the possibility that the high levels of stress to which these professionals are subjected during the pandemic may have psychological effects beyond this period. Previous catastrophes such as the Ebola, Zika, and SARS-CoV-1 (2003) epidemics^{11,13}, have demonstrated the permanence of negative psychological repercussions in the general population, extended beyond the duration of these epidemics. This psychological impact tends to be even more severe in healthcare workers¹⁴, who, besides the constant risk of infection, face several stressful factors, such as: work overload, sleep deprivation, stigmatization, fear of contaminating family members, insecurity in the application of new protocols, pain due to the loss of patients and colleagues, lack of personal protective equipment, among others¹⁰. A



study conducted by The Canadian Journal of Psychiatry demonstrated the persistence of higher levels of stress, depression, and anxiety even one year after the end of the 2003 SARS-CoV-1 epidemic in frontline health care workers¹³.

In addition, it is essential to analyze how the various profiles of those who work in health are affected by the pandemic of Covid-19 in different ways. There are those who work in the front line, with direct contact with patients; those who teach at a distance; those who started to perform virtual care and need to restructure their way of working; students; others. During the pandemic, the professional needs to keep themselves updated, apply care guidelines that are still uncertain, and work long hours. For the student preparing to care in the future, there is the need to adapt to remote learning and the concern about the validity of this form of learning. Within each group, characteristics such as gender, family income, family structure, workload, among others, are acting as possible vulnerabilities that must also be considered.

In view of this, the objective of the present study is to analyze the repercussions of coping with the pandemic of Covid-19 on healthcare professionals and students and compare the different profiles, in order to search for possible vulnerabilities associated with greater emotional overload.

Finally, knowing the repercussions of the Covid-19 pandemic on healthcare workers and students in São Paulo, as well as analyzing the possible vulnerabilities related to greater emotional overload are fundamental aspects in planning strategies to deal with possible future outbreaks of infectious and contagious diseases⁽¹¹⁾. Furthermore, the data obtained here can be used to target actions to promote mental health for this population.

Methodology

The research is part of a larger study that adopted a mixed approach: quantitative, in a cross-sectional and descriptive study, with the database analyzed using Excel spreadsheets and then run on the STATA program version 13.0; and qualitative, the methodology used in the section of which this article is part. For the reports submitted at the end of the questionnaire, we performed the analysis based on Bardin's¹⁴ qualitative research framework, widely applied in the field of collective health by social science researchers. We used content analysis, organizing the material studied into categories of analysis, which will be presented along with the discussion, relating them to data from the literature and conceptual reference about the theme. In health, researchers such as Cecília Minayo¹⁵ and Lilia Blima Schraiber¹⁶ have used this framework in several of their productions. In this way, we hoped to enrich the theoretical approach from the narratives of the personal experiences of the participants.



For data collection, the semi-structured questionnaire “Profile and burden of health workers and health care students in the Covid-19 Pandemic” was applied in Google Forms, with Informed Consent, approved by the Research Ethics Committee (CEP) of the Santa Casa de Misericórdia de São Paulo, CAAE: 32682920.9.0000.5479. The multiple-choice questions asked about socio-demographic data, area of work and/or study, impact of the pandemic on the classroom and/or work, contact with the Corona virus and diagnosis of Covid-19, factors generating burden in the midst of the pandemic in both the public (work and study) and private (home) environments, and manifestations of this burden on the individual. At the end, the questionnaire allowed the participants to leave their considerations/reports/comments in writing, with the following prompt: “Would you like to comment on something that seems important to you? The elaboration of our questionnaire was based on others already used in behavioral research in Brazil, such as the one on mental health of IMIP (Maternal and Child Institute of Pernambuco) and the one used by the Adelaides feminism and health group in the last congress of ABRASCO (Brazilian Association of Collective Health), both validated and well accepted by the interviewees.

The dissemination of the questionnaire by the researchers responsible was based on contacts among networks of healthcare workers and students, in social networks, WhatsApp application, academic centers, leagues, associations of physicians and nurses in the state of São Paulo. Responses were collected from June 22nd 2020 to August 7th 2020, being recorded in an automatically generated database and transferred to a virtual database.

The sample was of convenience, composed of health workers and students who were willing to answer the disclosed questionnaire. As with all non-probability convenience samples, it is important to note that the results obtained cannot be generalized. Nevertheless, the study of the answers and the reports from the members of this sample is relevant in order to understand the reality and the challenges experienced by the specific population it represents, the healthcare professionals and students in São Paulo.

The initial bank presented 386 answers. The inclusion criteria adopted were: working in the state of São Paulo, being 18 years old or older, and being a health professional or student. Thirteen replies were excluded because they belonged to participants who worked outside the state of São Paulo, and two because they were minors. Thus, the final sample included 371 responses suitable for analysis.

Finally, this manuscript was prepared in accordance with the international standards for qualitative research of the Coreq¹⁷.



Results

Characterization of the sample

Table 1. Sociodemographic data

	General (n=371)		Female		Male	
	n	%	n	%	n	%
Gender	-	-	287	77,36	84	22,64
Age						
18-21	130	35,04	108	37,63	22	16,19
22-24	67	18,06	46	16,03	21	25
25-41	82	22,10	58	20,21	24	28,57
42-71	92	24,80	75	26,13	17	20,24
Occupation						
Student in the health area	222	59,84	170	59,23	52	61,90
Health Professional	149	40,16	117	40,77	32	38,10
Monthly income						
Up to 4 *MW	72	19,41	62	21,60	10	11,90
4-8 MW	94	25,34	79	54,10	15	17,86
8+ MW	205	55,26	146	50,87	59	70,24
Student's course						
Medicine	150	67,57	105	61,76	45	86,54
Nursing	16	7,21	15	8,82	1	1,92
Psychology	36	16,22	32	18,82	4	7,69
Nutrition	10	4,50	10	5,88	0	0
Others	10	4,40	8	4,71	2	3,85
Healthcare Workers						
Doctor	41	27,52	23	19,66	18	56,25
Nurse	24	16,11	20	17,09	4	12,50
Psychologist	24	16,11	22	18,80	2	6,25
Nutricionist	11	7,38	10	8,55	1	3,13
Others	49	32,89	42	35,90	7	21,88

*Minimum legal wage, about 200 US dollars at the time.

Source: questionnaire prepared by the authors



Professional/academic activity and contact with Covid-19

When asked about the activity performed at the time of the survey, 36.91% of the professionals performed direct care of Covid-19 patients and 27.52% of them cared for non-Covid-19 patients. 35.57% were not in contact with patients, but worked in the areas of teaching and research, they were teachers or were not working.

Regarding the students, 77.48% pointed out that their academic activities were totally transformed to the distance-learning format as a consequence of the pandemic. 18.92% had hybrid teaching, with some online classes and face-to-face activities. 2.7% had their classes totally suspended and only 0.9% continued with face-to-face classes. Only 8.11% of the students were in direct contact with patients when the questionnaire was applied. Based on this, and due to the format that their academic activities acquired with the pandemic, 87.84% of students believe that their learning process will be impaired. These data show the concern with the future professional and with the ability to develop the essential competencies for health workers.

Assessing the repercussions of pandemic Covid-19, on well-being and mental health

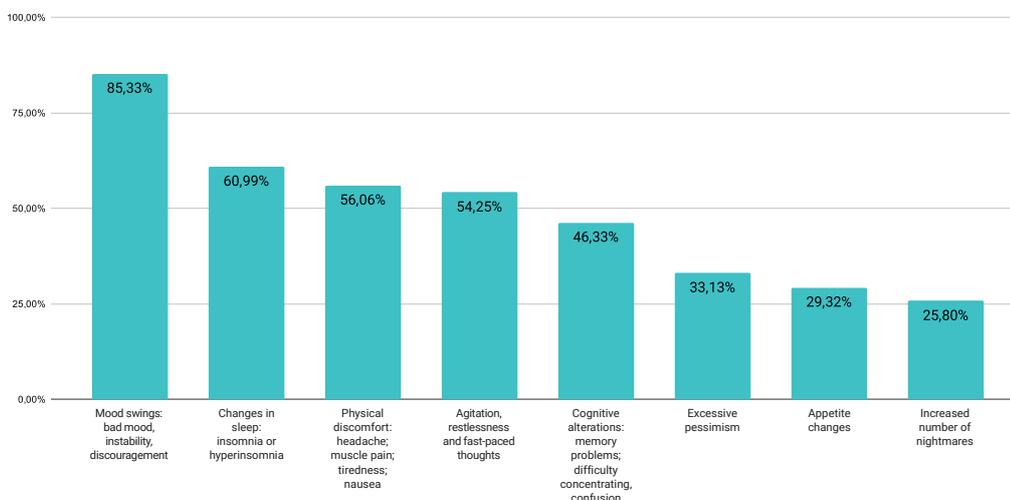
One of the major concerns in conducting this research was to understand how a large and unprecedented health event like the Sars-Cov-2/Covid-19 pandemic will impact the lives of the people who face it directly or even those who prepare to care for people. When evaluating the answers, we saw that when asked about the feeling of overload resulting from the pandemic, an alarming 91.64% of the participants answered that they felt overloaded, against only 8.4% who reported feeling no change. There was no significant difference between professionals and students. The main factors that caused the fatigue are shown in Table 2.

**Table 2.** What factors are major causes of exhaustion in this pandemic?

	Student in the health area		Health Worker		Overall Total
	n	%	n	%	%
Excessive teleworking	91	40,99%	31	20,81%	32,88%
Constant consumption of information about the pandemic	83	37,39%	79	53,02%	43,67%
Teleworking +housework and childcare	23	10,36%	28	18,79%	13,75%
Domestic work not divided equally	23	10,36%	7	4,7%	General: 8,09% Women: 9,41% Men: 3,57%
Child care	2	0,90%	4	2,68%	General:1,62% Women: 2,09% Men: 0,00%

Source: questionnaire prepared by the authors.

As for the repercussions of the overload, it was possible to select more than one alternative, and the great diversity of symptoms listed was alarming, both physical and psychological and cognitive (see graph 1). It is worth mentioning that most of the participants selected more than one symptom, showing the great complexity and relevance of the repercussions of the pandemic and overwork in this population. The relationship between these symptoms and feelings with those present in other situations of great emotional stress, such as experiences of violence¹⁸ or extreme fatigue from work, draws attention (burn-out syndrome)¹⁹ or from major conflict situations such as wars²⁰, for instance.



Source: questionnaire prepared by the authors

Graph 1. Manifestations of overload

Source: questionnaire prepared by the authors



Analysis categories

Finally, in the open space at the end of the questionnaire, we received a total of fifty responses. Of these, 17 were comments to the authors about the study, such as suggestions for the questionnaire, good luck wishes, and correction of errors in the completion, and were not used for the qualitative analysis. The other 33 are reports of personal experiences and opinions about the pandemic and were analyzed based on Bardin's qualitative health research through content analysis¹⁴. In this way, after analyzing the material, analysis categories were created, described below, to organize the discussion of what was found as content in the interviewees' statements.

- 1) Impact on family relationships and changes in habits
- 2) Routine changes and the need to adapt to reality in the field of work and teaching in health
 - a) Telework and distance learning
 - b) Adaptation as a generator of stress and dissatisfaction
- 3) About the lack of PPE for frontline healthcare workers
- 4) The impacts of rulers' actions in Brazil
- 5) Emotional distress: anxiety, fear, frustration, sadness and irritability as a result of exposure to work/study overload
- 6) Consequences of prolonged and conflictive family life, cooling down of interpersonal relationships due to social isolation, and the uncertainty about the new disease, aggravated by the decrease in family income
- 7) The feeling of devaluation and helplessness of healthcare workers
- 8) Domestic work and its asymmetrical division as a stressful and overburdening factor for health workers

We describe in the following section what was thought and raised as sentinel items in the speeches of professionals and students about each of the categories to follow with the analysis of our material:

- 1) The pandemic generated changes in the routine, with the sudden need to adapt to the new reality. The supports (social, economic, family, health) that individuals can count on have a great influence on their ability to adapt.
- 2) The pandemic generated changes in work and teaching. For some, remote activities emerged as a possible replacement. For others, exposure, with all the risks involved, remained the only alternative.
- 3) There is a lack of PPE for frontline professionals and this acts as a stressor and anguish generator.
- 4) Governments are failing to confront the pandemic: Besides being ineffective, their measures undermine the work of healthcare workers and misinform the population.



- 5 and 6) The period of crisis exacerbates emotional suffering. Feelings such as anxiety, fear, frustration, sadness, and irritability appear in different groups and result from exposure to factors such as: work/study overload, prolonged and conflicting family life, cooling of interpersonal relationships due to social isolation, uncertainty about the new disease, and decreased family income. It is essential to point out that the higher or lower exposure to these factors varies for each respondent, making them more or less susceptible to emotional distress.
- 7) There is a feeling of helplessness, lack of support from the government, and social stigmatization among frontline healthcare workers.
- 8) Domestic work, whose division is asymmetrical, acts as another stressor and overload generator for healthcare workers.

Discussion and reports

The satisfactory analysis of the results of the questionnaire, as well as of the reports brought by the participants required the epidemiological, political, and social contextualization of Brazil during the period of its application. It is also essential to reflect about the changes imposed by the pandemic and the social isolation in the routine of these individuals.

In this interval, regarding the world ranking of Covid-19, Brazil reached the second position in accumulated number of cases, the second in absolute number of deaths by Covid-19, the 10th in incidence and also in mortality per million²¹. If the possibility of infection is already extremely alarming for the general population, it is even more fearsome for healthcare workers. Besides the close and prolonged contact with the virus, increasing the chances of inoculation, those who are in the frontline watch the progression of the disease in patients and colleagues and fear infecting those with whom they share a home. In our survey, 78.52% of the healthcare workers reported having close acquaintances who had been diagnosed with or suspected of having Covid-19, a proportion similar to that found in national studies²².

[...] We go to work with fear and come back with fear. (R., female, 47 years old, administrative assistant, health management activity)

[...] the uncertainty in the face of a new disease causes a lot of anxiety. (M., woman, 55, physical therapist)

In the face of a public emergency of such proportions, it is essential for the government response to be coordinated, carefully planned, and guided by social justice and scientific evidence in order to reduce negative outcomes as much as possible. However, in Brazil, what happened in the political sphere was exactly the opposite, and the country presented one of the worst responses to the pandemic², maintaining a high moving average of cases, hospitalizations and deaths, with the emergence of a second wave of contamination in December, even before the first wave had ended⁶. The Brazilian population witnessed the



denial of science and the seriousness of the pandemic by the federal government²³, the lack of a clear and scientifically based plan, the instability in the command of the Ministry of Health²⁴, besides the disregard of the president, Jair Bolsonaro, with the high number of deaths, which was made clear through his speech “so what?” when asked about the new record of mortality by Covid-19 in the country²⁵.

This political scenario also has repercussions on the mental health of the population, accentuating feelings of helplessness, uncertainty, and fear. For healthcare workers the situation is especially delicate: according to the online survey “Impacts of the Coronavirus on the work of public healthcare workers”, by the Getúlio Vargas Foundation²⁶, 78% of the professionals interviewed do not identify positive actions of protection and support from the federal government. In our research, we found this same feeling of helplessness in the reports of both professionals and students at the end of the questionnaire:

The uncoordinated policies to face the pandemic in Brazil and the denialism of both the government and the population make my work difficult and frustrate several efforts by healthcare workers. (P., male, 60 years old, health system manager)

I would like to comment [...] on the Brazilian political scenario, [...] ineffective measures and positions contrary to the consensus. (C., male, 21 years old, student of psychology)

The Political movement is hindering the clarifications that should be more objective for all social classes. (E., female, 62 years old, nursing assistant)

Another direct expression of the uncoordinated health policies for frontline professionals is the insufficient PPEs as well as lack of training to use it²⁷: on average, only half of the Brazilian professionals received the required PPE²⁶. In addition to the risks of personal contamination and the spread of the disease, the lack of adequate material for protection accentuates the feelings of unpreparedness, fear, and insecurity that were already exacerbated in the healthcare teams during the pandemic, damaging their work and mental health.

The lack of PPE and lack of support for the work of the physicians serving in the current pandemic, that I think is the biggest stressor added to the fact that those with children have to do the extra work of teaching. (F., woman, 45, medical doctor)

Lack of masks to work with. (E., female, 44, psychologist)



During epidemics, there is a threat to the entire functioning of society²⁸ and several adaptations in the daily life of the entire population are needed. The presence of the Sars-CoV-2 virus has determined measures of social distancing and isolation, altering teaching, work, and leisure relationships, as well as family dynamics. Added to this picture, the dissemination of false news and work overload, creating a new reality that affects both the general population and healthcare workers and students.

In our survey, 77.48% of the students had their academic activities changed to Distance Learning with total suspension of practical activities. Alarming 87.84% of the students believe that their learning process will be impaired by the lack of practical activities. Remote teaching strategies, although important to contain the effects of social distance on learning, do not fill all the gaps: health care requires more than technical knowledge: it needs interpersonal skills, human contact so that care is humanized and comprehensive²⁹.

Other important challenges pointed out by the students in our research were the difficulty in adapting to the new academic routine, the erasure of boundaries between studies and leisure, the excessive distance work, and the lack of relaxing moments with friends due to social isolation.

For me, the biggest factor in fatigue is not having stress release moments, like a bar with friends. The stress just keeps building up indefinitely and that's the worst aspect of quarantine for me. (F., male, 27 years old, medical student)

For the first month of the quarantine I was able to do all my chores, a healthy diet and exercise; after that period my productivity dropped I stopped exercising and started consuming large amounts of highly caloric foods. (M., woman, 20 years old, medical student)

Although some may like tele-working, for teaching [...] although it can be adopted in some situations, by itself it represents a great loss, as nothing replaces face-to-face. (J., male, 64 years old, medical doctor)

As a counterpoint to the challenges faced by the students, we can think of the possibility of what was experienced during the pandemic also as a *sui generis* teaching/learning process that brought the students a practical possibility to understand the need for adaptation and knowledge of the new, to evaluate the importance of scientific research and the development of new competencies in their professional role, and to perceive which evidence is more scientifically and technically grounded. The same learning can be considered for professionals and for the health system as a whole. This is the moment to broaden the critical consciousness about health as a right for all and a duty of the State, as well as to defend the Brazilian National Health System (SUS) as the foundation of democracy.



Depending on the supports of each individual, social isolation can mean a moment of reflection, of redirecting attention and aligning goals, as pointed out in the following statement:

As a sixth-year medical student, the pandemic was an opportunity for greater dedication to study for the residency test [...] everything was very busy with the daily routine and having to study as well. Now I can handle the studies and the daily routine. I have time to dedicate myself. The pandemic was [...] an opportunity for reorganization and directed dedication. (S., female, 24, medical student)

The pandemic of Covid-19 also brought important changes in the home environment and in family relationships. The prolonged family life associated with sudden changes in routine and financial instability are factors that have accentuated disagreements and friction in homes³⁰. In this context, it is fundamental to highlight that there is not a unique scenario to be observed: in a country like Brazil, marked by inequalities, different families have counted on more or less support and stability to face the pandemic³¹. For example, the most vulnerable social classes were less likely to adhere to measures such as social isolation and tele-working, either due to precarious housing conditions or weak employment relationships³¹.

The concern and burden also comes from the decrease in family income, by the search for alternative incomes with informal jobs... (T., woman, medical student, 20 years old)

The hardest part is the longer contact with the family inside the house, which creates more fights and wear and tear. (I., male, 21 years old, medical student)

Another issue of great relevance in the domestic environment is the asymmetrical division of tasks: Brazilian women are still the main responsible for housework and childcare, being subjected to the so-called double workday³². In our survey, the proportion of women who mentioned the unequally divided housework (cleaning, dishwashing, washing, and ironing clothes) as the main factor of fatigue in the midst of the pandemic was more than double that of men (9.41% of women versus only 3.57% of men). Moreover, childcare was pointed out as the main factor of fatigue by some of them, while the same did not occur among them. Thus, the inequalities in the social gender roles are evident³³ as has long been pointed out in publications by feminist literature. In the pandemic, it seems to be no different: the burden of domestic work falls on women healthcare workers, who, after the long workday on the front lines of the pandemic, find themselves with more duties and responsibilities not taken up by men, whenever they get home³⁴. Recent medical demographic data point to a *feminization* of medicine, with a female majority in the youngest group of physicians³⁵. Considering also the other health areas, the front line in fighting the pandemic is female and these professionals are doubly overloaded, as is evident in the following reports:



[...] I think it's the biggest stressor in addition to the fact that those who have children have to do all the work of teaching. (F., woman, 45, medical doctor)

The division of labor is asymmetrical. (S., woman, 63 years old, activity in health management and research)

[...] It is worth mentioning that having to support home studies for small children is very tiring, especially when combined with an active professional life. (R., 47 years old, nutritionist)

Amidst the highly unstable scenario resulting from the pandemic of Covid-19, it is important to keep up to date regarding what is happening in Brazil and in the world. However, consuming excessively negative news can exacerbate anxious and depressive thoughts³⁶, besides increasing the feeling of powerlessness in the face of reality. In our research, the excessive consumption of information about the pandemic was pointed out as the main factor generating fatigue by 53.02% of the professionals and 37.39% of the students.

Finally, it is essential to remember that the healthcare workers working today on the front lines of the Sars-CoV-2 pandemic are the same as they have been since March, as well as the students. Thus, thirteen months into the pandemic, these people are exhausted by the high demand for care, lack of PPE, remote teaching and social isolation, conflicting information dissemination, and public policy failure.

Following Pan American Health Organization reports about previous epidemics²⁸, it is estimated that between one third and half of the population exposed to an epidemic may suffer some psychopathological manifestation, according to the magnitude of the event and the degree of vulnerability of the person at the time. Considering that the work environments and processes in which health professionals work already have a high physical and emotional burden, the fact that this is exacerbated by the pandemic³⁷, and that students prepare for caregiving and feel their teaching is impaired, it is clear that these groups are especially vulnerable to negative mental health repercussions during the pandemic¹⁰. Recent publications, have pointed out the suffering caused by the pandemic as a type of mental health sequelae bordering on the unbearable, such as cases of attempted suicide³⁸ or other symptoms, such as phobia and extreme anxiety.

In our research, this fact stands out through the wide range of manifestations indicated by alarming proportions of the participants: mood changes, sleep, appetite, physical discomfort, pessimism, confusion, among others (see graph 1).

The biggest wear and tear in that period is being emotional. (A., female, 44 years old, nurse, non-Covid-19 patient care)



The emotional stress caused by the pandemic is enormous for the whole family, including the children: anguish, insecurity, anxiety, irritability. [...] (R., woman, 47, nutritionist)

It seems that work is never ending, even in the moments of rest the head is still at work...maybe it is a form of escapism to think less about the pandemic... (R., female, 21 years old, nutritionist)

May this Pandemic End Soon! (S., female, 50 years old, supervisor, activity in health management)

Conclusions

More than a year and a half into the pandemic of Covid-19, it is clear that its repercussions go beyond the biological implications and extend to the entire functioning of society, family relationships, work and study, the economy, as well as everyone's mental health. Healthcare workers and students are especially vulnerable in this context, since they not only present the stressors common to the whole society during the pandemic context, but also several others arising from their role in care: fear of infection (in themselves and in family members), frustration when facing unfavorable outcomes of patients and colleagues, uncertainty about the duration of the pandemic, work and study overload, social isolation and reduced income. In the current Brazilian scenario, other stressors are added: failures of public policies, government negligence, and inconsistent information.

Just as public health policies have been organized to deal with the pulmonary sequelae caused by the new coronavirus, it is essential that the same should be done for the mental health sequelae resulting from the pandemic.

We would like to end emphasizing the importance of transforming what was experienced during the pandemic into teaching/learning, recognizing the relevance of scientific research and expanding the critical consciousness about health as a right for all and a duty of the State.



Authors' contribution

All authors actively participated in all stages of preparing the manuscript.

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Conflict of interest

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No Brasil, além do Coronavírus, enfrentam-se escassez de Equipamentos de Proteção Individual (EPIs), manutenção da mesma força de trabalho na linha de frente e política pública de saúde instável, com informações discordantes, tornando esse período extremamente desgastante. Esta pesquisa avalia as repercussões da pandemia da Covid-19 sobre os diferentes perfis de profissionais e estudantes da Saúde no estado de São Paulo. Utilizou-se questionário *on-line* semiestruturado validado, com análise quantitativa, via processamento de dados pelo *software* STATA 13.0, e qualitativa, por análise de conteúdo proposta por Bardin. Os achados corroboram a prevalência de importante sobrecarga nos estudantes e profissionais da Saúde, manifestada por alterações em humor, sono e cognição, ansiedade, desconforto físico, pessimismo e aumento de pesadelos. Como contraponto aos desafios, a pandemia trouxe potente processo de aprendizagem e a possibilidade prática de compreender a necessidade de adaptação e reconhecer a importância da pesquisa científica.

Palavras-chave: Covid-19. Saúde mental. Profissionais da saúde. Exaustão.

En Brasil, además del coronavirus, hay que enfrentar la escasez de Equipos de Protección Individual (EPIs), el mantenimiento de la misma fuerza de trabajo en la línea de frente y una política pública de salud inestable, con informaciones discordantes, haciendo que este episodio sea extremadamente desgastante. Esta encuesta evalúa las repercusiones de la pandemia de Covid-19 sobre los diferentes perfiles de profesionales y estudiantes de la salud en el estado de São Paulo. Se utilizó un cuestionario online semiestruturado, validado, con análisis cuantitativo vía procesamiento de datos por el software STATA 13.0, y cualitativa, por medio de análisis de contenido propuesto por Bardin. Los hallazgos corroboran la prevalencia de una importante sobrecarga en los estudiantes y profesionales de la salud, manifestada por alteraciones en el humor, sueño y cognición, ansiedad, incómodo físico, pesimismo y aumento de pesadillas. Como contrapunto a los desafíos, la pandemia brindó un potente proceso de aprendizaje y la posibilidad práctica de comprender la necesidad de adaptación y reconocer la importancia de la investigación científica.

Palabras clave: Covid-19. Salud mental. Profesionales de la salud. Agotamiento.