



Chapter 17

The mental health of professionals in the health area: a study carried out during the COVID-19 pandemic

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ABSTRACT

The health professionals are constantly exposed to risky factors of deteriorating mental health. Specially during the COVID-19 pandemic, these factors increased considerably. According to this, the results presented in this search aim to point factors related to work that cause deterioration of the mental health in this professional category, starting of the data collection that happened during the pandemic. Thus, there was an sociodemographic questioning on 146 health professionals, including both gender in two public hospitals. There was also a questioning about work occupations in order to

identify what can develop the changes in the quality of life. In the results, the female gender was predominant; married ladies, mothers, that were nurses, referring to the work place and people relation, the subjects told the work environment were not calm; however, circa of 40% of the answers about work did not appoint an issue in the relationship with workmates and their bosses. About the cognitive function, the same subjects related the job required skills and specific knowledge, and that was a challenge. The professionals appointed the doing of the work in a fast and intense pace, besides controversial requirements in the work environment. Stands out that more than 50% of the subjects of the search said that their families were infected by the COVID-19 during the pandemic, and their income decreased during this time. The facts presented are related with the work conditions that can negatively interfere in the mental health of the workers, according to the literature. It is expected that the results exposed can help in decisions made by bosses and the making of the needed psychological interventions, to the point of minimizing the negative impact at work and be a preventive thing.

Keywords: Risky factors, Health professionals, Work environment.

1 INTRODUCTION

Work, being an eminently social activity, plays a fundamental role in the living conditions of man, with a positive effect when it meets the basic needs of workers, but also represents a source of exposure to risks present in the environment, capable of directly interfering in their condition (Backes, 2012), which can be affected in different ways according to the profession and the workplace.

The hospital, as a workplace, presents it self as an unhealthy environment, with predisposing factors for physical and/or psychological damage to workers, due to the work activities produced there, by coexistence daily with the suffering of patients and family members, the inadequate physical and

material resources, the reduction of the workforce, the pace of work intensified, among other factors. All these and other conditions, often inadequate, have attributed to work in health services attributes of a major stressor, as well as responsible for accidents and diseases (Abreu, Gonçalves, & Simões, 2014; Campos & David, 2011).

Stress is an inevitable component of the living process and the response to coping with this exhaustion is a crucial survival mechanism. The human body reacts to stress, triggering a series of responses, and in view of its occurrence in the acute form, the individual prepares for action, and before its chronic form there is wear, with brain changes that mental health problems (King, 2016).

In this context, occupational stress is evidenced, which is that from the work environment (Yuwanich, Sandmark, & Akwhavan, 2015). Chronic exposure to this type of stress results in effects at the individual and organizational level. In the individual dimension, chronic stress has negative implications on the physical and mental health of workers; already in the organizational context, it affects work organizations due to absenteeism, high turnover of employees and productivity (France, Oliveira, Lima, Melo, & Silva, 2014).

The morbidity profile of workers in health services has been characterized by work-related musculoskeletal disorders and, in addition to them, mental disorders, including depressions, anxiety disorders and burnout, resulting, among others, from work overload, lack of recognition of performance, difficulties in the inter-professional relationship and constant demands (Campos, David, Souza, & 2014; Mininel, Baptista, & Felli, 2011).

Mental disorders are responsible for a significant increase in absenteeism observed in the hospital environment, contributing to the increase in the cost in hospital institutions, directly impacting the country's economy.

In addition to absenteeism, "Presenteeism is an occupational and psychosocial phenomenon that affects the work environment, resulting in losses in productivity and implications for the health condition of workers, with the potential to become a serious public health problem." (Homrich, Dantas-Filho, Martins, & Marcon, 2020, p. 97).

A survey conducted by Santana, Sarquis, Brey, Miranda, & Felli et al. (2016) in the databases of the Ministry of Social Security in 2012 shows that the conditions of illness in health professionals by mental disorders burdened the public coffers in an amount of R\$ 211 million for the payment of social security benefits, with an estimated that in 20 years after that date, the damage caused by this problem reaches a value around R\$ 16 trillion.

However, this panorama may have been aggravated by the emergence and rapid spread of a new virus, the New Coronavirus, with impacts on the physical and mental health of health service workers.

Since 1960 Coronavirus infections have been known to the scientific community, with seven main types of Coronavirus Human, four of which account for 5 to 10% of mild acute respiratory diseases (Chen, Liu, & Guo, 2020).

The new Coronavirus SARS-CoV-2 was discovered on December 31, 2019 (Li et al., 2020); in March 2020, the pandemic of the disease caused by the new Coronavirus SARS-CoV-2, named Coronavirus Disease 2019 (COVID-19), led public services to a new scenario of health and safety actions aimed at the various professionals involved in the care for the population.

It is noteworthy that it is a disease with transmission favored by close and unprotected contact with whether the beliefs or excretions of an infected patient, mainly through salivary droplets and that leads patients to severe respiratory failure (Del Rio, Malani, 2020, WHO, 2020a; WHO, 2020b).

The impacts in terms of public health in terms of a virus that is easily and rapidly spread in the population are severe, leading to an abrupt change in the routines of health services, observing a scenario of intensification of hospital admissions by respiratory complications (Gallasch, Cunha, Pereira & Junior, 2020).

Overcrowding of health units, lack of inpatient beds and care equipment are problems in the organization of work, which impact the health of care teams in the pandemic situation (Liu, Li, Feng, & Brazil, 2020). In addition to these issues, it is urgent to draw attention to failures in the protection of workers, which have been the reality observed in several countries (Del Rio, & Malani, 2020, Liu, Li, Feng &, Brazil, 2020). In view of this scenario, the contamination and illness of professionals involved in patient care is a reality, with an increasing number of 3,387 cases of illness and death of health workers and, affected by COVID-19 (Wang, Zhou & Liu, 2020). In 2020 there was a significant increase in deaths. Between 80 and 180,000 professionals were affected, according to WHO data (2021).

The health-related complications of the team working in the face of the COVID epidemic 19 have been related to the availability of personal protective equipment (PPE), their training for the use and disposal of these devices, to the overload suffering (Wang, Zhou, Liu, & Chen, 2020).

The pandemic of the new coronavirus (COVID-19) is the largest public health emergency facing the international community for decades. In addition to the concerns about physical health, it also brings concerns about the psychological suffering that can be experienced by health professionals involved in care, as well as by service managers, responsible for the structure, organization of processes, technology and people management.

In view of the above, it is objective that the results of the present and study may indicate factors associated with work, which may cause limitations to the mental health of health professionals, starting from a data collection performed in state public hospitals of Minas Gerais during the aforementioned pandemic, assisting in the taking of decision of managers, as well as in the formulation of necessary psychological interventions, in order to minimize the negative impacts of work and act preventively.

2 MATERIALS AND METHODS

2.1 STUDY MODALITY, PLACE OF REALIZATION AND PARTICIPANTS

The research method chosen is the case study, using quantitative techniques, being descriptive ly cross-sectional. According to Yin (2001), the case study is an empirical form that analyzes a current phenomenon within a context of reality. The survey took place intentionally and for convenience through the indication of the Central Administration (CA) of the FHEMIG Network in two hospitals of the public network of the State of Minas Gerais.

The Central Administration has four boards: the DPGF Planning, Management and Finance Directorate, which has 04 managers and 119 servers; the Dcgi Information Management and Contractualization Board, which has two managements and 55 servers; the DIRASS Assistance Board, which has three 03 managers and 44 servers and the DIGEPE People Management Board, which has two centers, 03 managers and 188 servers.

Hospital "A" has become a reference in the care of patients with COVID-19. It was inaugurated in 1954 and, in the early 1980s, began to dedicate itself to care for medical clinic and tisiology (lung diseases). With the onset of the AIDS epidemic in the 1980s, Hospital "A" opened beds for patients with the disease and shortly thereafter became a reference for this syndrome and other infectious diseases. It serves about 1,600 patients, with about 100 monthly hospitalizations. It also offers the Hospital-day (with more than 50 registered patients) for Tuberculosis, parasitic infectious diseases (PID) and Leishmaniasis; and the ADT - Therapeutic Home Care (which varies care, according to the needs of patients). The outpatient service treats about 500 patients per day, with care for infectious diseases, especially Tuberculosis, AIDS and Dermatology.

Hospital "B" was considered a reference hospital for the treatment of COVID-19 in the northwest of Minas Gerais. The coverage area reaches 33 municipalities, with about 700,000 inhabitants. In 2020, according to epidemiological data from the Health Department of 07/05/2020, the city where the hospital has its head office had 544 cases of COVID-19 and 6 deaths up to that moment. The hospital had, at the time of the research, ten ICU beds for COVID and ten infirmary beds. The rate of absence of health professionals in hospital "B", suspected of COVID, was increasing at the time of the project. All these factors previously mentioned reinforce the initiative of a survey on the health of the employees of the state public network of Minas Gerais.

The analysis units were health professionals and managers. All health professionals who worked to cope with the pandemic in the two hospital units were included in the sample, and all directors and managers of the central administration, present on the days of data collection, totaling 146 participants. Participants who did not agree to sign the Informed Consent Form (TCLE), as well as those who filled out the data surveyed and or were absent on the days of data collection, were excluded.

2.2 TECHNIQUES (OR INSTRUMENTS) FOR DATA COLLECTION AND ANALYSIS

For the implementation of the research, a sociodemographic and occupational questionnaire was applied, as well as the abridged version of the Job Stress Scale (APPENDIX A), translated into Portuguese and validated in Brazil by Alves, Chor, Faerstein, Lopes & Werneck (2004) to survey questions related to predisposing stress factors and mental illness.

The instruments were made available digitally, and for filling out was used the Google Forms® platform, from link triggered by the search team, by email and / or WhatsApp®.

The quantitative data collected through the instruments were analyzed, using the Microsoft Excel program for formatting and presentation of graphs through descriptive statistics, which aims to investigate in isolation the relationship between each explanatory variable, without taking into account the set of variables under study, in order to determine the frequency distribution of the data.

2.3 ETHICAL ISSUES

Because it is a research involving human beings and in order to meet the ethical precepts of Resolution 466/12 of the National Health Council (BRASIL, 2012), the project was forwarded to the Research Ethics Committee and approved under opinion no. 35869020.3.0000.5119 131B/2020. The participation of the subjects was voluntary and conditional on the signing of the TCLE, which was previously inserted to the instruments in the Google Forms® platform and, at the end, two marking options: I agree to participate in the study or do not agree to participate in the study. If accepted, the potential participant responded to the instruments via link.

This route aims to ensure the confidentiality, privacy, protection of the image and the non-stigmatization of the participants. It is also worth mentioning that the results of this research will not bring legal complications, since it will not be possible to relate them directly with the workers of the institution, guaranteed the anonymity of the participants and the anonymity of the hospital, scenario of the study, which will only be cited by authorization document.

It is believed that some participants could feel constrained when participating in the research, when answering the questions. Thus, in the contact between researchers and participants, it was clarified that, if they felt any discomfort, embarrassment, or wanted to interrupt their participation in the research, they should notify the researcher. It was also reported that if the participant wanted to give up, there would be no problem. Any damage that occurred, even if not foreseen, would be compensated and the same, assisted. The participation, therefore, was voluntary, that is, was only with the participation of people who wanted to contribute to the research. The identity of the members was guarded, remaining confidential. Refusal to participate did not cause any harm in the relationship with the researcher or the institution.

The researchers assured that what was recorded and written would be respectfully used and that the data, the information was and will be kept confidential and anonymous.

3 RESULTS AND DISCUSSION

The characterization of the research participants is described in the following table.

Table 1 - Sociodemographic characterization of health professionals in the state public network , MG, 2020

Variable	Category	%	n = 146
Sex	Male	20,5	30
	Female	79,5	116
Age Group	21 to 30 years	14,4	21
	31 to 40 years	47,9	70
	41 to 50 years	24,7	36
	51 to 60 years	11,6	17
	61 to 70 years	1,4	2
Schooling	Complete fundamental	1,4	2
	High School	29,5	43
	Complete Higher Education	26,0	38
	Full Specialization	37,7	55
	Full Master's Degree	3,4	5
Number of people reside with you	Full Doctorate	2,1	3
	No	34,9	51
	1 person	32,2	47
	2 people	26,0	38
	3 people	6,2	9
	4 people	0	0
Civil State	5 people	0,7	1
	Married	57,6	84
	Single	25,3	37
	Other	7,5	11
	Stable Union	9,6	14
Was there a change in your marital status during the pandemic?	No	90,4%	132
	Yes	9,6%	14
Existence of children	Yes	93,2%	136
	No	6,8%	10
Number of Children	0 son	35,0	51
	1 son	32,2	47
	2 children	26,0	38
	3 children	6,1	9
	4 children	0	0
	5 children	0,7	1
Do you have private space at home to work or rest?	Yes	69,9	102
	No	18,6	27
	Partially	11,6	17
Did anyone in your family relationship have COVID-19 during the pandemic?	Yes, 1 person	16,4	24
	Yes, more than one person	34,2	50
	No	49,3	72

Source: The authors

Regarding gender, the vast majority, corresponding to 79.5% of the interviewed participants, are female. This predominance of females was also described in a study conducted by Leonel (2021) in Fiocruz, when analyzing the impact of the pandemic on health professionals.

Regarding age, it is noteworthy that 47.9% mentioned that they were between 31 and 40 years old when the questionnaire was applied. These data are similar to those of the research conducted by Carrillo-García, Solano-Ruíz, Martínez-Roche & Gómez-García, in which most of the participating professionals were middle-aged, between 31 and 50 years. This age group corresponded to approximately 66.7% of the sample.

Regarding schooling, 37.7% of the participants answered having a complete specialization. In the study by the Interunion Department of Statistics and Socioeconomic Studies (DIEESE, 2021), in relation to the level of education of health professionals in the 4th quarter of 2020, 49.1% of the workers in this segment had complete higher education, compared to 24.5% in all economic activities.

Regarding the number of residents, the majority of the interviewees, 67.1% answered that they lived alone or accompanied by at least one person. In this sense, professionals do not live with a large number of people from the family nucleus.

In the marital status, a result was obtained according to the participants' notes of 57.6% married. In this context, it is worth mentioning the survey conducted between January and September 2021, in which more than 101,000 formalizations were recorded, according to a survey conducted by the Brazilian Notarial College (CNB), with citizens Brazilian. Compared to the same period of 2020, there was considerable growth, since 89,000 new unions had been registered (Bernardes, 2022). Data from the Brazilian Institute of Geography and Statistics (IBGE, 2022) also confirm the increase in civil records during 2020, resulting in 750,746 couples in Brazil.

Regarding the change of marital status in the pandemic, in the present study, it is perceived by the statements of the participants that there was an increase of only 9.6%, while the greatest result is related to stability in the relationship, with 90.4%. According to data from Colégio Notarial do Brasil, from January to June 2021 there were 37,083 divorces, an increase of 24% compared to the first half of the year with the beginning of the Covid-19 pandemic (Brazilian Institute of Family Law [IBDFAM], 2021). Throughout 2020, 76,175 divorces were recorded, an increase of only 1.5% compared to 2019; compared to the present study, there was a difference of 8.1% in the marital status of health during the pandemic. Two years ago, 75,033 couples formalized separation (IBDFAM, 2021).

When asked about the existence of children, 93.2% mentioned that they had children. According to data from the State Data Analysis System Foundation (SEADE, 2021) obtained in relation to Brazilian women in 2021, there was a reduction in the number of children. The average number of children between 2000 and 2020 went from 2.08 per woman to 1.56, meaning a reduction of 25%. The IBGE shows a drop of 34.5% of women who did not have children and 32.4 had only 1. In this scenario, the country recorded

an average of 1.94 children per woman, being below the population replacement rate, which was 2.1 children per woman (Francisco, 2022).

Regarding the private space and for rest, 69% of the health workers reported that they had in their homes a resting and privacy environment.

Regarding the contamination of family members by Covid-19, according to the participants, 50% had one or more of the family members contaminated by covid-19 at the time of the study (2020). Although there is no official statistic on the subject in the country, the doctors consulted by BBC News Brazil point out that episodes of this type increased significantly between February and March 2021, there is a proportional increase in infections within families (Biernath, 2021). Similar data were also presented by the Medical News and Updates Portal (PEBMED), which showed that among those who have not yet had a diagnosis for the new coronavirus (58.3%), 86.1% were afraid of becoming infected. The fear of taking the Covid-19 virus into the house is high: 97.2% of respondents said they feared infecting family members with the disease (Portal Hospitais Brasil, 2021).

Regarding occupational characteristics, the data obtained are presented in table 2.

Table 2 - Occupational characterization of health professionals in the state public network, MG, 2020

Variable	Category	%	n = 146
Unit of operation	Hospital A	80,1	117
	Hospital B	19,9	29
Position/function	Agas	2,7%	4
	Advisor	1,3%	2
	Social Worker	0,7%	1
	Administrative Assistant	9,0%	13
	Leadership	1,3%	2
	Coordination	1,3%	2
	Director	0,7%	1
	Economist	0,7%	1
	Nurse	18,6%	27
	Pharmacist	1,3%	2
	Physical therapist	1,3%	2
	Manager	0,7%	1
	Doctor	16%	23
	Driver	0,7%	1
	Not Informed	4,1%	6
	Nutritionist	1,3%	2
	Psychologist	1,3%	2
Working time in years and months	Nursing Technician	34,3%	50
	Pharmacy Technician	0,7%	1
	Pathology Technician	0,7%	1
	Technician In Work Safety	1,3%	2
	Up to 10 years	45,2%	66
	From 11 to 20 years	34,9%	51
	From 21 to 30 years	9,6%	14
From 31 to 40 years	10,2%	15	

Net Household Income	Up to 2 minimum wages	2,7%	4
	Up to 4 minimum wages	39,7%	58
	Up to 9 minimum wages	30,2%	44
	Up to 19 minimum wages	27,4%	40
Occurrence of negative change in family income during the pandemic	Yes	41,1%	60
	No	58,2%	85
Commuting time from your home to work, round trip	Up to 1 hour	87,7%	128
	Up to 2 hours	10,3%	15
	Up to 3 hours	1,4%	2
	Up to 4 hours	0,7%	1

Source: The authors

The research was carried out in two public hospitals in the state of Minas Gerais, in different cities. The majority of the answers to the questionnaire applied were from employees of hospital A, located in the west of the state, corresponding to 80.1% of the health workers.

Regarding the positions of public servants, the occupation of nursing technicians was in the responses of the participants in greater quantity, with 34.3% in relation to the other positions; as a nurse, 18.6% and a physician, 16%. And the other cargos, individually had very small quantitative. These data corroborate the PEBMED research in 2021, with health professionals in Brazil, of the professionals who worked on the front line, 1,013 are physicians, 668 are nurses and 558 are nursing technicians, among 4,398 professionals heard (Medicina S/A, 2021). A study conducted by the National School of Public Health (Ensp/Fiocruz) and the Center for Strategic Studies (CeE/Fiocruz) revealed in relation to the Labor Force during the pandemic, that the majority of the team is composed of nurses (58.8%), followed by physicians (22.6%), physiotherapists (5.7%), dentists (5.4%) and pharmacists (1.6%), with the other professions corresponding to 5.7%, showing a multiplicity of functions as well as the study presented here.

Most of the professionals in the on-screen research (45.2%) mentioned having up to 10 years of work in the public health network. Of the employees who answered the questionnaire, regarding monthly family income, the majority had an average of 4 (39.7%) to 9 (30.2%) monthly minimum wages, while (2.7%) mentioned income of 2 minimum wages. Regarding the data from the survey conducted (IBGE 2021), it was pointed out that during the pandemic period, the family income of Brazilians was affected and was 1,353.00 per month.

Given the scenario of pandemic and economic changes, 41.1% stated that there were changes in their family income during this period. Research conducted by the Data Senado shows that the family income of 68% of Brazilians decreased due to the pandemic of the new coronavirus. For 26% of the interviewees, the income remained the same and for 6%, aumentou. The survey was with 1,200 people, through calls to landlines and mobiles.

Most of the public servants interviewed mentioned that the time of travel from their homes to work was up to 1 hour (87.7), while only one person (0.7) mentioned the time of up to 04 hours of commute to work.

Regarding the work environment and interpersonal relationships, the collected data are arranged in the following table.

Table 3 - Characterization of the work environment and interpersonal relationships pointed out by health professionals of the state public network, MG, 2020

Variable	Category	%	n = 146
Existence of a calm and pleasant environment where I work	I totally agree	13,7%	20
	I agree more than disagree	42,2%	63
	I totally disagree	13,0%	19
At work, we relate well to each other.	I disagree more than I agree	30,1%	44
	I totally agree	33,6%	49
	I agree more than disagree	53,4%	78
I can count on the support of my co-workers .	I totally disagree	2,7%	4
	I disagree more than I agree	10,3%	15
	I totally agree	33,3%	50
If I'm not on a good day, my colleagues understand.	I agree more than disagree	47,9%	70
	I totally disagree	3,4%	5
	I disagree more than I agree	14,4%	21
At work, I relate well to my bosses.	I totally agree	23,3%	34
	I agree more than disagree	45,8%	67
	I totally disagree	6,2%	9
I like working with my colleagues.	I disagree more than I agree	24,7%	36
	I totally agree	52,0%	76
	I agree more than disagree	40,4%	59
	I totally disagree	1,4%	2
	I disagree more than I agree	6,2%	9
	I totally agree	47,9%	70
	I agree more than disagree	47,3%	69
	I totally disagree	0,7%	1
	I disagree more than I agree	4,1%	6

Source: The authors

Regarding the relationship and the environment, 42.2% reported agreeing more than disagreeing that they had a quiet and pleasant place of work and 30.1% disagree more than agree that they had these environments, with a difference of only 12.1% of the participants who agreed that there was a calm work environment.

Regarding interpersonal relationships, 53.4% of the participants reported having a good relationship with the other team members. And 47.9% mentioned that they could count on the support of colleagues when necessary, being welcomed when they are not and a good day; (45.8%) received the understanding of the too. In a study applied by PEBMED in Brazil in 2021 to health workers, 53.7% of professionals disagree that they felt psychologically supported in their work environments, when compared to the previous year (Medicina S/A, 2021).

Regarding the coexistence with hierarchies, the participants mention that they relate well to their bosses in the workplace (52.1%), in the same way that they reported a certain proximity to colleagues (47.9%).

Health professionals were also investigated for questions related to their skills, knowledge, initiative and creativity, as described in table 4.

Table 4 - Perception of health professionals of the state public network, MG, in 2020 regarding their skills, knowledge, initiative and creativity

Variable	Category	%	n = 146
Possibility to learn new things in your work	Sometimes	34,9%	51
	Frequently	56,2%	82
	Never or almost never	1,4%	2
	Rarely	7,5%	11
Does your job require a lot of skill or expertise?	Sometimes	21,2%	31
	Frequently	76,7%	112
	Never or almost never	0%	0
	Rarely	2,1%	3
Does your job require you to take initiatives?	Sometimes	11,0%	16
	Frequently	86,2%	126
	Never or almost never	0,7%	1
	Rarely	2,1%	3
In your work, do you have to repeat the same tasks many times?	Sometimes	22,6%	33
	Frequently	76%	111
	Never or almost never	0%	0
	Rarely	1,4%	2
Can you choose HOW to do your job?	Sometimes	45,9%	67
	Frequently	17,1%	25
	Never or almost never	14,4%	21
	Rarely	22,6%	33
You can choose WHAT to do in your work?	Sometimes	27,4%	40

	Frequently	11,7%	17
	Never or almost never	24,7%	36
	Rarely	36,2%	33
Make very challenging commitments in the context of work.	Sometimes	43,2%	63
	Frequently	39,7%	58
	Never or almost never	4,8%	7
	Rarely	12,3%	18
Having to do work activities well above my technical capacity and/or recent learning activities, of which I do not yet have full mastery.	Sometimes	24,7%	36
	Frequently	18,5%	27
	Never or almost never	27,4%	40
	Rarely	29,4%	43

Source: The authors

Of the employees interviewed, 56.2% answered that there was often the possibility of learning new knowledge in the work environment. However, the majority of the participants (76.7%) stressed the need for greater knowledge and skill for the practices performed at that time, stating that this requirement was often required in their functions.

It is noteworthy that the performance of the professional in the health area requires skills and attitudes of immediate action, in view of the needs of the place to perform its function. This fact is confirmed when, when asked if the work requires them to take initiative in front of their duties, 86.2% felt that they often need to take such actions.

Data from the on-screen survey show that 76% of participants answered that they often repeated the same task throughout the day. Repeated effort can often cause physical and muscle injuries in workers, becoming occupational diseases that most affect Brazilians. Data from PEBMED (Neves, 2019) reveal that from 2007 to 2016 there were 67,000 diagnostic cases increasing significantly by 184%, compared to previous years.

Regarding having autonomy to choose how to do the activities, 45.9% of the answers to the questionnaire refer to the fact that professionals have little autonomy. Regarding the choices made about what to do, 36.2% reported that they can rarely choose what to do at work.

Data related to this subject, in the study conducted by Buenno and Queiroz (2006), showed that of the 59 nurses, the majority (63.8%) of the representatives of the sample considered that they exercise their professional function with autonomy, diverging from the results of the present research, in which the majority did not mention this autonomy.

The environment of professional practice is affected by the presence of organizational characteristics in the work environment, which facilitate or hinder professionals to develop their practices. Hospital organizations are complex systems, composed of several emotionally intense situations, such as life, illness and death, which cause anxiety and physical and mental tension. Due to these factors,

professionals assume challenging commitments in the hospital context, a fact that was seen in the present study, in which 43.2% answered that they assume this position.

However, 29.4%, answered that they rarely performed activities that required mastery above learning capacity, while 27.4% of the interviewees mentioned that they never had this need.

Aspects such as the perceptions of health professionals regarding intensity and demands at work, mostly is that work tasks should be performed quickly, intensely, with contradictory demands, which is described in Table 5.

Table 5 - Perception of health professionals of the estadual public network, MG, in 2020, regarding intensity and demands at work

Variable	Category	%	n = 147
Do you think and/or accomplish two or more things when at the same time, with difficulty in completing them, even when there is no requirement to do so ?	Sometimes	20,0	24
	Frequently	17,8	26
	Never or almost never	30	36
	Rarely	50	60
How often do you have to do your work tasks very quickly	Sometimes	21,9	32
	Frequently	74,7	109
	Never or almost never	1,4	2
	Rarely	2,1	3
How often do you have to work hard (i.e. , produce a lot in a short time)?	Sometimes	32,2	47
	Frequently	64,4	94
	Never or almost never	1,4	2
	Rarely	2,1	3
Does your job require too much of you ?	Sometimes	36,3	53

Source: The authors

Regarding the performance of multitasking by the health professional, the research obtained a result in which 60% of the interviewees reported that they had difficulties to complete them at the same time. According to a survey conducted by UTAH University, only 2.5% of people reported that they can perform more than one activity at the same time with quality; the others (97.5%) said that they unfold to meet all needs and end up frustrated throughout this process.

The majority of health professionals (74.7%) surveyed reported that they often needed to perform their work very quickly/speed. The pace of tasks can directly influence the quality and safety of the activity performed.

The functions performed require intense effort of the workers, which was demonstrated by 64.4%, who said that the time of producing too much in a short period causes considerable overload and mental snare. Thus, the information and concentration are compromised, and can lead to errors, this more often.

Care for lives needs an extra responsibility, coming from the people who provide it. In this context, it is noteworthy that 61% of the interviewees answered that they felt that the requirement was frequent in the exercise of their profession. However, 45.2% mentioned that the time of realization was mostly sufficient to meet the demands.

The information directed to employees sometimes became contradictory and discordant, according to 50.7% of the interviewees. Research conducted by Spagnol (2010) shows that most conflicts in the health area are related to the divergence of ideas and opinions contrary to the environment. This disagreement generates a negative perception, which can interfere with motivation and work performance, as well as be positive, promoting knowledge and professional growth.

Among the participants, 36.3% said they led their lives in a racecourse, even outside the workplace. Haste is becoming increasingly common in people's lives; but it triggers a number of factors and feelings such as anxiety and intense energy load to deal with all the stimuli of everyday life, and can develop the Disease of Haste, called by the Doctor in psychology, Ana Maria Rossi. According to research by the Stress Management Association Brazil (ISMA-BR) in 2006, 56% of people used prescription drugs for anxiety and depression or self-medicated, while 48% used alcoholic beverages in an attempt to relax.

Regarding being able to disconnect from work even after the end of the work, 34.2% of employees stated that they cannot disconnect from work. It is noteworthy that this behavior contributes to the triggers of stress, tiredness and the development of Burnout. The functions of physicians and nurses require a greater mental effort of workers and are among those that most affect professionals, according to data from the National Association of Occupational Medicine (2018).

Regarding the work and environment aspects of the health professionals evaluated, there are factors that could cause excessive tension. 34.2% reported that some indicators were not considered in the questions described in the research at that time.

4 CONCLUSION

The data obtained in this survey, concerning the work environment and interpersonal relationships, showed that about 40% of the participants reported that the work environment is not calm and pleasant. On the other hand, in terms of relationships, there were no large notes that demonstrated evident problems of relationship, both with the leadership and with colleagues.

As for their skills, knowledge, initiative and creativity, participants largely reported that the work requires many skills and expertise, initiative, repetition of tasks and challenging commitments.

The perceptions of health professionals regarding intensity and demands at work, mostly are that tasks should be performed quickly, intensely, with contradictory demands.

It is also noteworthy the fact that during the pandemia, more than 50% of the professionals who participated in the research had people from their family relationship contaminated with COVID-19. In addition, almost 50% mentioned that they had a decrease in monthly family income during this period.

These last two facts are added to all of the above, which relate the working conditions may negatively interfere with the mental health of employees , as the literature points out.

In view of all these findings related to the work of health professionals, it is expected that the results of the research will stimulate the adoption of measures that protect and/or restore the mental health of workers who were perhaps afflicted by developed mental disorders due to the pandemic.

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ANNEX A - Short Version of the job stress scale

Table 3 – Short version of the job stress scale.

Questionnaire about **Demands, Control and Support**

Demands (D) Often, Sometimes, Seldom, Never/almost never

D1. Do you have to work very fast?

D2. Do you have to work very intensively?

D3. Does your work demand too much effort?

D4. Do you have enough time to do everything?

D5. Does your work often involve conflicting demands?

Control (C) Often, Sometimes, Seldom, Never/almost never

C1. Do you have the possibility of learning new things through your work?

C2. Does your work demand a high level of skill or expertise?

C3. Does your job require you to take the initiative?

C4. Do you have to do the same thing over and over again?

C5. Do you have a choice in deciding HOW you do your work?

C6. Do you have a choice in deciding WHAT you do at work?

Support (A) Strongly agree, Mildly agree, Mildly disagree, Strongly disagree

A1. There is a calm and pleasant atmosphere where I work.

A2. We get on well with each other where I work.

A3. My co-workers support me.

A4. The others understand if I have a bad day.

A5. I get on well with my supervisors.

A6. I enjoy working with my co-workers.

*Cedida por Tóres Theorell