

# QUALITY OF LIFE OF HEALTH PROFESSIONALS IN PRIMARY HEALTH CARE DURING THE COVID-19 PANDEMIC

## QUALIDADE DE VIDA DOS PROFISSIONAIS DE SAÚDE DA ATENÇÃO PRIMÁRIA À SAÚDE DURANTE PANDEMIA DO COVID-19

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**Abstract: Introduction:** The participation of the family health strategy teams was essential in combating and controlling the pandemic since the beginning of the COVID-19 pandemic. of the health professional. **Objective:** To analyze the impact of the Covid-19 pandemic on the quality of life of primary care health professionals. **Methodology:** This is a descriptive cross-sectional study with census characteristics, submitted to the ethics committee of the Faculdade Adventista da Bahia under registration CAAE: 38999120.2.0000.0042. The sample consisted of primary health care professionals from the city of Governador Mangabeira-BA, using the instruments used as the Anxiety and Depression Questionnaire - HAD, Brief Pain Inventory, Wholqol-bref. **Results:** 98 health professionals participated in the study, 83.67% women and 16.33% men. The presence of anxiety in health professionals was identified, 33% of the population had symptoms related to anxiety and

23% had a chance of having already developed chronic anxiety. 27% of the population showed symptoms of depressive signs and 12% were likely to have already developed depression. As for the pain symptom, 92.6% of the studied community reported the presence of pain in body regions of primary care, even though it is not possible to state whether the pandemic was the main cause of damage to the health of the studied population.

**Keywords:** Covid-19; Primary Health Care; Health Surveillance.

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## INTRODUCTION

Sars-cov-2 has a high rate of transmissibility and infectivity, and can be confused with a common flu. It may present as initial symptoms runny nose, sore throat, cough and fever, in addition to being asymptomatic at the mildest levels, thus becoming a warning sign for public authorities due to its potential for transmissibility. However, if there is a mild symptomatology, it should be noted that it is also lethal in severe cases, especially when individuals who are part of groups classified as risk groups are infected, such as those individuals who have chronic diseases, are pregnant, are cancer patients and/or the elderly <sup>(1,2)</sup>.

Faced with this scenario, the National Health Surveillance Agency (ANVISA), the World Health Organization (WHO) and government public authorities have established strategic actions and expanded measures to combat Sars-cov-2. Actions such as social distancing, social isolation, use of Personal Protective Equipment (PPE) were adopted, and, through health education, the practice of personal and environmental hygiene habits was encouraged. These procedures were indicated/adopted with the aim of reducing transmissibility and viral containment, influencing the reduction of hospitalizations, enabling better care for hospitalized patients and patients in serious conditions, minimizing impacts on health, economic and social systems <sup>(2,4)</sup>.

Due to the high transmissibility of the virus, it is essential that protective actions are carried out in a coordinated and harmonious way between the governmental spheres, through the ministry of health, as well as the state and municipal health departments. Primary Health Care (PHC), through basic health units, plays important functions in coping with Sars-cov-2, in the monitoring of cases of low complexity and in population orientation, in addition to providing support to groups of social vulnerability <sup>(5)</sup>.

The intense and extensive working hours can cause health professionals pain and physical

exhaustion. These are factors that can interfere with the quality of life of such professionals, with potential triggering depression, anxiety, in addition to influencing the emergence of burnout syndrome <sup>(6,7)</sup>.

Decreased sleep quality, stress, irritability, sadness, depression and anxiety can be symptoms related to burnout syndrome, which can be triggered in the individual who suffers from constant stress. In the case of health professionals, there was an increase in work, in addition to external stress - both linked to the pandemic environment. Burnout causes several types of sequelae, among them are: decrease in labor productivity; lack of attention, increasing the risks of accident in the workplace; and impairment of the quality of care <sup>(8)</sup>.

The somatization of the stressors brought by the pandemic enhances the risks to quality of life, and may cause physical, mental, social and environmental damage, which are necessary aspects to obtain a good quality of life. In addition to the problems already evidenced related to the exercise of the profession, there was a considerable increase in aggressions to health promoters who work on the front line of the fight against the Sars-cov-2 virus, a factor that negatively influences the mental and physical health of professionals. This context can interfere with the work performed by these agents <sup>(9,10)</sup>.

The scarcity of individualized protective equipment, the increase in working hours and the high rate of infected are factors with the potential to impact the quality of life of health professionals working in primary health care. Therefore, this study aims to analyze the impact of the Sars-cov-2 virus pandemic on the quality of life of health professionals linked to primary health care, as well as to assist in the implementation of prevention and health protection measures of these professionals.

## METHODOLOGY

This is a cross-sectional study with a quantitative and descriptive approach, with census characteristics by convenience, having as target audience primary health care professionals, linked only to the primary health care network present in the city of Governador Mangabeira - BA. Data collection took place in the months of September to November 2020 and participated in the study by health professionals working in the Sars-cov-2 pandemic, who were literate and who had signed the Free and Informed Consent Form (TCLE).

Professionals on leave because they were considered at risk (carriers of chronic diseases; pregnant women, cancer patients and the elderly), professionals with two or more employment relationships, did not participate in the study. Professionals who have more than one employment relationship may have high workloads, which has the possibility of influencing the quality of life of

this individual. Another important factor considered for this criterion is that the professional can exercise an employment function that is not linked to the primary care network, thus, we sought to prevent the emergence of possible biases.

For data collection, questionnaires were used with sociodemographic information reconciled with questions that analyze the professional's perception of their health in relation to the pandemic. Anxiety and depression questionnaire - HAD, Brief Inventory of pain and the instrument for assessing quality of life (Wholqol-bref), the questionnaires used were validated and approved for use in the Brazilian population <sup>(11-13)</sup>.

The sociodemographic questionnaire was developed for the independent variables, such as: sex, race/ethnicity, profession, age, level of academic training. It was also used to indicate the perception of professionals in relation to the pandemic, their work and health.

The HAD instrument consists of 14 questions, in which each contains 3 alternatives with values of 0-3, with the sum of the results that were obtained from indicators of unlikely, possible and probable depression and/or anxiety. The brief pain inventory evaluates: pain points, average and intensity of the pain felt in the last 24 hours.

Developed by the world health organization - WHO for the evaluation of quality of life, the Wholqol-bref contains 26 questions and 24 facets, its applicability analyzes the physical, mental, social and environmental domains. The analysis of the results is given by the indices of 1-5, being: 1 to 2 - needs to improve; 3 - regular; 4 - good; Both instruments (HAD and Wholqol-bref) have been validated and their applicability approved for the Brazilian population <sup>(2,11-13)</sup>.

For the applicability of the study, the authorization of the municipal health department was requested, with the presentation of the CAAE approval certificate: 38999120.2.0000.0042, issued by the ethics committee of the Adventist College of Bahia. Together, a report was presented explaining the objective of the study and the steps arising from the collection.

Data collection was carried out in person, following sanitary guidelines such as distancing, interviews in ventilated rooms, use of masks replaced every two hours and application of 70% alcohol gel. Based on nine basic health units and two satellite units, located in the city of Governador Mangabeira - BA.

The interpretations of the data associated with psychological and/or mental health were conducted with the help of the psychology professional. The statistical analyses were carried out through the Statistical Package for the Social Sciences (SPSS) software for quantitative and descriptive analysis. The percentage and frequency of the data obtained were also analyzed for correlation, as well as the chi-square test was applied, being adopted as a significance value  $p \leq 0,05$ .

## RESULTS

98 health professionals participated in the study, linked to the city of Governador Mangabeira - BA, being doctors, nurses, oral health assistants, cleaning professionals, community health agents and nursing technicians. The corpus was composed, for the most part, of women 83.67%, married, aged between 18 and 55 years, self-declared brown 55.10%, and 41.84% completed high school, according to data described in table 1 and table 2.

**Table 1** – Describes mean and standard deviation, minimum and maximum related to age. Governador Mangabeira, Bahia, Brazil, 2020.

Variable	Medium	
	36,52 ±8,65	
Age	<b>Min.</b>	<b>Max.</b>
	18	55

Source: Own Authorship.

**Table 2** – Presents statistical data related to independent variables. Governador Mangabeira, Bahia, Brazil, 2020.

Variables	n	%
<b>Sex:</b>		
Female	82	83,67
Male	16	16,33
<b>Skin color:</b>		
Brown	55	55,10
Black	33	36,67
White	7	7,14
Not declared	4	4,08
<b>Scholarity:</b>		
Complete high school	41	41,84
Graduated	16	16,33
Specialization	15	15,31
Incomplete higher	13	13,27
Incomplete high school	5	5,10
Complete primary education	5	5,10
Incomplete primary education	1	1,2
Literate	1	1,2
<b>Occupation area:</b>		
Community health agents	31	31,63
Recepcionists	12	12,24
Nurses	13	13,27
Cleaning professionals	10	10,20
Tech. Nursing Help	9	9,18

Help oral health	7	7,14
Dentist	6	6,12
Doctor	5	5,10
Driver	5	5,10
<b>Total</b>	<b>98</b>	<b>100</b>

Source: Own Authorship.

The self-perception of health professionals regarding quality of life indicates that 65.3% have a good quality of life, and 62.2% consider themselves to be in good health, as described in table 3.

**Table 3** – It represents the perception of health professionals in relation to quality of life and quality of health. Governador Mangabeira, Bahia, Brazil, 2020.

Variable	n	%
<b>Quality of life</b>		
Need to improve	8	8,1
Regular	19	19,3
Good	65	66,3
Very Good	6	6,1
<b>Health Quality</b>		
Need to improve	18	18,3
Regular	17	17,3
Good	61	62,2
Very good	2	2
<b>Total</b>	<b>98</b>	<b>100</b>

Source: Own Authorship.

The data obtained from the domains reveal that 50% have regular physical health, 51.2%, regular psychological health, 42.8% good social health, 67.3% regular environmental health and 0% excellent environmental health, as described in table 4.

**Table 4** – Demonstrates the indicators of quality of life of health professionals. Governador Mangabeira, Bahia, Brazil, 2020.

Variable	n	%
<b>Physical Health:</b>		
Need to improve	17	17,3
Regular	49	50
Good	31	31,6
Very Good	1	1
<b>Psychological Health:</b>		
Need to improve	12	12,1
Regular	50	51,2
Good	35	35,7
Very Good	1	1,2

<b>Social Health:</b>		
Need to improve	18	18,2
Regular	35	35,7
Good	42	42,8
Very good	3	3
<b>Enviromental Health:</b>		
Need to improve	16	16,3
Regular	66	67,3
Good	16	16,3
<b>Total</b>	<b>98</b>	<b>100</b>

Source: Own Authorship.

Anxiety indicators reveal that 57.08% have anxiety indicators, with 33.67% having probable anxiety and 23.47% having possible anxiety. In the analysis of depression symptoms, it is noticed that 39.79% have depressive indicators, with 27.55% possible and 12.24% probable depression, shown in table 5.

**Table 5** – Describes indicators of possible and probable presence of anxiety and depression. Governador Mangabeira, Bahia, Brazil, 2020.

<b>Variable</b>	<b>n</b>	<b>%</b>
<b>Anxiety</b>		
No indicators	42	42,86
Possible	33	33,67
Likely	23	23,47
<b>Depression</b>		
No indicators	59	60,20
Possible	27	27,55
Likely	12	12,24
<b>Total</b>	<b>98</b>	<b>100</b>

Source: Own Authorship.

The data obtained also indicated that 51.9% of health professionals had 1 to 3 points of pain; and 22.4% had 4 to 6 points of pain, as shown in table 6.

**Table 6** – Demonstrates pain points indicated by health professionals. Governador Mangabeira, Bahia, Brazil, 2020.

<b>Variable</b>	<b>n</b>	<b>%</b>
<b>Pain points</b>		
0	7	7,1
1-3	51	51,9
4-6	22	22,4
7-10	13	13,1

11-15	5	5,2
<b>Total</b>	<b>98</b>	<b>100</b>

Source: Own Authorship.

The data presented in table 7 demonstrate the weakest pain intensity felt by health professionals, and 58% felt pain with an intensity of 1 to 3; and 22.4% reported not feeling pain.

**Table 7** – Proportion and intensity of weakest pain felt in the last 24 hours. Governador Mangabeira, Bahia, Brazil, 2020.

Variable	n	%
<b>Weakest pain felt in the last 24 hours</b>		
0	22	22,4
1-3	58	59
4-6	16	14,1
8-10	17	17,1
<b>Total</b>	<b>10</b>	<b>100</b>

Source: Own Authorship.

As for the strongest pain felt in the last 24 hours, 33.5% reported feeling pain with intensity from 1 to 4; 23.4% felt pain with intensity 5 to 7; 14.1% had pain with intensity 8 to 9, and 21.4% reported not feeling high intensity pain in the last 24 hours, as shown in table 8.

**Table 8** – Proportion and intensity of the weakest pain felt in the last 24 hours. Governador Mangabeira, Bahia, Brazil, 2020.

Variable	n	%
<b>Strongest pain felt in the last 24 hours</b>		
0	21	21,4
1-4	33	33,5
5-7	23	23,4
8-9	14	14,1
<b>Total</b>	<b>98</b>	<b>100</b>

Source: Own Authorship.

When correlating the indicators of anxiety and depression with the fields related to quality of life, it is noted that anxiety is related to physical health and depression to physical and psychological health. In addition, it indicates that depression and anxiety are directly linked, as described in table 9.

**Table 9** – Describes the correlation between the quality of life domains and the anxiety and depression indicators. Governador Mangabeira, Bahia, Brazil, 2020.

Variable	Value	Df	p
<b>Correlation between QOL and Anxiety</b>			



Anxiety and Q.S	18,55	6	0,05
Ansiedade and S.F	32,01	6	0,01
Anxiety and PS	14,05	6	0,29
Anxiety and R.S	12,08	6	0,60
Anxiety and M.A	8,74	4	0,68
Anxiety and pain	29,60	24	1,98
<b>Correlation between QOL and Depression</b>			
Depression and Q.V	13,15	6	0,41
Depression and Q.S	12,55	6	0,51
Depression and S.F	25,58	6	0,01
Depression and P.S	20,35	6	0,02
Depression and R.S	8,92	6	1,78
Depression and M.A	14,99	4	0,05
Depression and Anxiety	58,87	4	0,01

Source: Own Authorship.

## DISCUSSION

The national and international experience arising from the experience related to the pandemic coping measures of the Sars-cov-2 virus, popularly known as coronavirus, triggering severe acute respiratory syndrome type II, has shown how necessary is the mobilization and performance of all health professionals and levels of action. Thus, primary health care was included in the pandemic fight with the aim of strengthening health surveillance, being fundamental for the implementation and implementation of prevention and protection measures for the Brazilian population, in addition to being a bridge between patients with moderate and severe disease to large hospital centers <sup>(1)</sup>.

The functions performed by PHC can be divided into four niches: territorial health surveillance; social and educational support to the vulnerable population; educational support and awareness of the less vulnerable population; and realization of the actions and activities of exclusive function of the PHC. With the new functions implemented by PHC, there was an increase in the labor activity performed by health professionals in primary health care, impacting the quality of life of professionals, being a group mostly made up of women <sup>(2)</sup>.

The professions linked to care are commonly formed by women due to the social and historical aspects that make up society since their formation. It is noteworthy that, in the past, the professions linked to care, among them health professions, were formed by mostly black volunteer women, immigrants who, due to their position of social vulnerability, submitted to the work of care as a form of subsistence <sup>(14)</sup>.

Over time, the professions related to care have been recognized and formalized before the regulatory laws of labor. Through its regulation, care professionals, including health professionals,

began to have rights, however, due to their historical origin, they did not receive social or financial recognition, sequelae that persist in our days <sup>(14,15)</sup>.

Considering that the composition of health professionals is mostly made up of women, other studies show that, due to exhaustive working hours and hormonal oscillations, women can be more vulnerable and this context can trigger stress, depression and pain <sup>(16,17)</sup> but it does not disqualify them in exercising these functions and enabling alternatives that reduce the impact of psychosocial risks in the PHC care process.

One of the psychosocial theories about sexual susceptibility to the emergence of anxiety and depression highlights the existence of different ways in which men and women interpret themselves. Men freely correlate with themselves in an emancipated way, while women analyze themselves taking into account who is around them, thus being an interdependent analysis <sup>(3)</sup>. This factor can contribute to the increase in psychological pressure in decision-making in the pandemic process, potentiating the stressors, making women vulnerable to the development of anxiety and, in the long term, depression <sup>(18)</sup>.

It is noteworthy that poor physical health directly affects mental health and poor mental health negatively influences physical health <sup>(18)</sup>. Studies report the derived changes developed by depression in human physiology, among them we find musculoskeletal, cognitive, emotional, cardiovascular changes, changes in the central nervous system and damage to neural excitability, triggered by disorders in the production of neurotransmitters that regulate body functions important for Among these is acetylcholine, which is responsible for learning, attention and memory; and serotonin, which acts as a regulator of mood, sexual desire and memory <sup>(19)</sup>.

Likewise, physical inactivity negatively and directly impacts physical and psychological health, influencing poor bone health, the cardiovascular system, the hormonal system, the metabolic system, social health, provides the emergence of obesity, in addition to serving as a trigger for psychosocial diseases <sup>(20)</sup>. The aforementioned factors explain the development derived from poor physical and psychological health and its correlation with each other. In addition to developing negative interference in problem solving and assertiveness, they alter the quality of sleep, manifest personal dissatisfaction and interpersonal relationships, fundamental skills for good work performance <sup>(21)</sup>.

The continuous stress linked to the occupation of the individual can also serve as a trigger for the emergence of psychosocial diseases, among them anxiety and depression, significantly increasing the risks of accidents at work, decreasing occupational health. One of the sequelae triggered by psychosocial diseases are absenteeism and incapacity for work, other sequelae linked to these diseases are related to environmental and social health. This occurs when the Psychological <sup>(22-24)</sup>.

In addition to generating anxiety and depression, excessive stress triggers systemic changes,

which can influence the emergence of ulcers, gastritis, dermatitis, changes in the cardiovascular system, premature aging and can also lead to sudden death <sup>(14,15,25)</sup>.

On the other hand, the implementation of Integrative and Complementary Practices (PIC) in occupational health, aimed at PHC health professionals, are fundamental to reduce the impacts related to overwork in the context of the pandemic, considering the health professionals who work in primary health care. ICPs also act in the prevention of syndromes such as burnout, psychological disorders such as anxiety and depression and fatigue, as well as in the condition of assisting in the treatment of pain, being feasible their implementation in primary health care <sup>(26)</sup>.

The limitation of the study is related to the absence of indicators that confirm that the indices of quality of life, anxiety, depression and pain are strictly linked to the covid-19 pandemic. However, it is possible to say that the tension, overwork and concern arising from the pandemic can serve as "agents" of worsening quality of life indices. The study also reveals the lack of evidence and the need for studies that analyze in depth the impact of anxiety on the quality of physical health.

## CONCLUSION

The results show that the covid-19 pandemic contributed to the involvement and worsening of the quality of life of primary care health professionals, indicating that the population studied developed and/or presented worsening in the indicators of anxiety and depression. In addition, the data point to the presence of pain with high and medium intensity, mainly impacting the physical, psychological and musculoskeletal health of each individual. It is not possible, in this study, to affirm whether the pandemic caused damage to the health of the population studied, however, it is understood that the results found demonstrate a need for these themes to be addressed and their symptoms monitored.

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