# International Journal of Health Science

## COVID-19: IMPACTS ON THE MENTAL HEALTH OF PRIMARY CARE WORKERS IN GUANAMBI-BA

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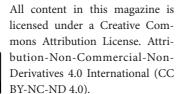
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Abstract: Goal: To describe the prevalence of the impacts of the COVID-19 pandemic on the mental health of professionals at the Basic Health Unit. Methods: This is a descriptive and analytical study with a qualitative approach and cross-sectional in the city of Guanambi/ BA, Brazil, whose population consisted of 39 workers in the health area of primary care comprising 4 health units: The Basic Unit of Health (UBS) Deputy Gercino Coelho; UBS André de Souza Ribeiro; UBS Eurivaldo Cardoso Vieira; UBS Dr. Gizelda Cardoso de Almeida Barros. Data collection was performed online. The psychosocial impact in relation to social distancing was evaluated through a questionnaire applied by Bezerra et al (2020), the screening of non-psychotic mental disorders were evaluated through the Self Reporting Questionnaire (SRQ 20), the practice of physical exercises was evaluated by the International Physical Activity Questionnaire (IPAQ), behavioral factors were assessed using a questionnaire used by Malta et al (2020), and sociodemographic and clinical variables were assessed using a questionnaire prepared by the researchers. The questionnaires were made available to the participants through the whatsapp application, through the Google Forms. Results: The study revealed that about 30% of the sample had a positive score on the SQR-20. The factors associated with psychosocial stress during the pandemic were: fear of being infected by the virus, concern about the family member leaving the home and routine interference with social isolation. Conclusion: The COVID-19 pandemic had a psychosocial impact on health workers, so it is necessary to develop public policies and install support and treatment measures aimed at this population. Keywords: COVID-19. Impacts of the pandemic. Mental health. Health professionals. Primary attention.

### **INTRODUCTION**

human coronavirus was discovered in 1937 and, through microscopic analysis in 1965, due to its morphology it was given that name. There are thousands of coronaviruses and they all tend to infect individuals along their trajectory. Among the most common are Alpha Coronavirus 229E and NL63 and Beta Coronavirus OC43, HKU1 (FRANÇA, et al., 2021). The pandemic caused by COVID-19 was identified as the new coronavirus, SARS-CoV-2, first detected in December 2019 in Wuhan, China, and, from its rapid spread across countries, the World Health Organization declared international emergency. In this social context, it is observed that measures to control the transmissibility of the virus are causing repercussions on the health of the population in which social distancing and isolation are causing changes in daily life with feelings related to mental health damages. (BEZERRA, et al., 2020).

In this sense, the pandemic brought psychological consequences, among which the impediment of working and moving freely, troubled family life, fear of death, disruption of social coexistence, uncertainty of the effectiveness of control measures (SOUZA, et al., 2021) stand out. In addition to these, the impact of the pandemic has caused stress induced by the change in work routines, which has resulted in and intensified problems such as Burnout syndrome, irritability, stress, anxiety disorders, depressive disorders, severe mental illness, sleep disorders, fear and insecurity. to contaminate family members (TAVARES, 2021).

Therefore, health professionals are a risk group because they work directly and indirectly with COVID-19 and because of the stress of changing working conditions in which most of the time it is inadequate. In addition to this imminent risk of contamination, there are problems such as physical fatigue

and psychological stress, which are linked to care with contact with family members, fear, loneliness and concern for family life directly impact mental disorders. (TEIXEIRA, *et al.*, 2020).

These factors combined with the exposure of health workers to the new virus had strong negative impacts that trigger mental and physical suffering, among them common mental disorders (CMD) that are divided into two categories: depressive disorders and anxiety disorders. Depressive disorders are mainly associated with low self-esteem, tiredness, loss of interest in activities and anxiety disorders are associated with excessive fear of common situations, phobias, feelings of anxiety and generalized anxiety (MALAQUIAS, et al., 2021).

Given the relevance of the global COVID-19 pandemic, without many scientific studies aimed at evaluating the psychosocial impacts on mental health, the sociodemographic and behavioral factors of primary health care workers in Guanambi, Bahia, the need for the current study is justified. Therefore, it can serve as an instrument of intervention strategies aimed at promoting the mental health of health professionals and with relevance to combat the effects caused by the pandemic.

### **METHODS**

The study was conducted as part of a project called "COVID-19: Impacts on the mental health of workers in the Basic Care of Guanambi-BA", developed by a Research Group from the FIPGuanambi University Center, approved by the Research Ethics Committee whose opinion refer to 5,315,545.

This is a research that will be carried out through a descriptive and analytical study with a qualitative approach and cross-sectional in the city of Guanambi/BA, Brazil, whose population was composed of 39 workers in the health area of primary care comprising 4 units of health: The Basic Health Unit (UBS) Deputy Gercino Coelho; UBS André de Souza Ribeiro; UBS Eurivaldo Cardoso Vieira; UBS Dr. Gizelda Cardoso de Almeida Barros.

The Guanambi micro-region has an estimated population of 85,353 people in a population density of 60.8 inhab/km2 distributed in a territorial area according to the 2020 sense of 1,272,366 km2. The total population is 371,379 thousand inhabitants, with 53% of the population in the urban area and 47% in the rural area. This micro-region contains 17 municipalities: Caculé, Caetité, Guanambi, Igaporã, Iuiú, Ibiassucê, Jacaraci, Lagoa Real, Licínio de Almeida, Matina, Mortugaba, Malhada, Palmas de Monte Alto, Pindaí, Riacho de Santana, Sebastião Laranjeiras and Urandi (IBGE, 2021).

The sampling was of the probabilistic type and the formula for finite population was used for sample calculation. The inclusion criterion was to be at least 18 years old; know how to read and write; work in basic health units in the city of Guanambi-BA. Before the data collection period, a pilot study was conducted, with university students belonging to the authorship of the study and who were not part of the final sample. The pilot study allowed the questionnaires to be tested. After this phase, adjustments were made to the collection instrument and the research was started.

Data collection was carried out online between April 29 and May 26, 2022. Questionnaires were made available to research participants using the application whatsapp, through the system Google Forms. The researchers contacted the person in charge of each unit to distribute the link to the groups of the health units and later we went to each unit to reinforce the importance of answering the questionnaires. The Free and Informed Consent Term was attached to the questionnaires.

The dependent variable was represented by the psychosocial impact in relation to social distancing by the COVID-19 pandemic, which was evaluated through a questionnaire applied by Bezerra et al (2020), adapted with the following variables: whether the individual is afraid of being infected by the virus, if you are worried if someone has to leave the house, if the virus interfered with the daily routine during isolation, if there was a change in the sleep pattern, if the symptoms interfered with the daily routine, if concentration difficulties and if physical symptoms affect in the daily routine. Each item presents a yes or no answer to later assess how much the COVID-19 virus has positively or negatively impacted the lives of workers.

The independent variables were subdivided into sociodemographic and behavioral habits. Sociodemographic and clinical data were evaluated, such as: will use the following variables: sex (female or male), age group (up to 35 years old, 35 to 60 years old, 60 years old or more), skin color (white, brown, black or yellow), marital status (single, married and divorced), family wage income (one minimum wage, two minimum wages, three minimum wages, above three minimum wages), who does he/she live with (alone, family or friends), children (No children, 1 to 3 children, 4 to 6 children), working in areas other than the USF (yes or no), time working in the FHS (up to 1 year, one to five years, six to 10 years and more than 10 years), previous mental disorder (yes or no), COVID-19 risk group (over 60 years old, diabetes mellitus, systemic arterial hypertension, heart disease or respiratory problems).

To screen for non-psychotic mental disorders, the Self Reporting Questionnaire - SRQ 20 will be used, a proposal from the World Health Organization that measures possible mental and behavioral disorders and suggests symptoms of diseases such as depression,

anxiety and stress, validated by Santos, Araújo, Pinho and Silva with a sensitivity of 68% and specificity of 70.7%, in which SRQ > 7 indicates suffering from psychological disorders and SRQ <7 indicates no suffering (DUARTE, et al., 2020). After the sum of the questions, the average was obtained and the results were dichotomized in the presence or absence of mental suffering due to a psychic disorder.

The evaluation of behavioral factors will use the variables practice of physical exercises, consumption of alcoholic beverages and use of cigarettes. The practice of physical exercises will be evaluated by the International Physical Activity Questionnaire (IPAQ) in its short version that was validated and translated by Matsudo et al. (2001). This questionnaire uses the following variables: how many days of the week you walked for at least 10 minutes; total walking time; how many days of the week did you do some moderate activity for at least 10 minutes; total time for moderate activity; how many days of the week did you do some vigorous activity for at least 10 minutes; total time of vigorous activity. From the minutes/ week measurements, the research subject can be classified as sedentary, irregularly active and active. The sedentary does not perform any activity. The irregularly active does not meet the criteria for active, being classified as A with a frequency of 5 days a week or duration of 150 minutes per week or classified as B that does not meet any of the criteria for frequency or duration. The active are those who perform vigorous activity for 3 or more days and with time equal to or greater than 20 minutes per activity or; moderate activity or walking for 5 days or more with equal or greater time and 30 minutes per week or; any activity that is added together will be greater than or equal to 5 days a week or equal to and greater than or equal to 150 minutes/week. After the sum, the result was dichotomized

into active or non-active for data discussion (MATSUDO, et al., 2001).

To evaluate the behavioral factors of alcohol consumption and cigarette use, a questionnaire used by Malta et al (2020) adapted with the variables: Smokes (if yes, answer before the pandemic how many cigarettes you smoked on average per day and during the pandemic how many cigarettes you started to smoke) and drink alcoholic beverages (if yes, during the pandemic you continued drinking as often, drinking more than you used to, drinking less than you used to, or had stopped drinking and started drinking again). After the sum, the results were dichotomized into smokers and non-smokers, and use of alcoholic beverages in relation to the amount after the pandemic to correlate the data obtained. After the sum, the result was divided into smokers and nonsmokers, and use of alcoholic beverages in relation to the amount after the pandemic in order to correlate the data obtained. (MALTA, et al., 2020).

### **RESULTS**

Thirty-nine primary care health workers from 4 health units in the municipality of Guanambi-BA were interviewed, and of these, about 30% had a positive score on the SQR-20.

In the questionnaire, regarding the profile of the investigated sample, more than half of the workers were female, aged between 35 and 60 years, brown skin color, living with family members, having 1 to 3 children, working in a single UBS, not having previous mental disorder and not being a risk group for COVID-19. With regard to marital status, most of the sample were single or married, with a family salary income of one or two minimum wages and with a period of experience in the UBS of one to five years.

In table 1, regarding the characterization of the psychosocial impact on workers, more than half of the sample is afraid of being infected by the COVID-19 virus, they felt worried when someone in their family had to leave the house, there was interference in their daily routine due to the virus, there were no changes in sleep pattern during the pandemic, he had no difficulty concentrating during this period and physical symptoms did not interfere with his daily routine.

In the questionnaire, regarding the behavioral factors of the investigated sample, more than half of the workers do not smoke and do not drink alcoholic beverages. Of the population that smokes, there was a 50% increase in cigarette use per day. Of the population that drinks alcoholic beverages, more than half continued to drink with the same frequency.

Table 2 presents the results of the Self Reporting Questionnaire (SRQ) in workers, in which more than half do not have frequent headaches, do not have a lack of appetite, do not sleep poorly, are not easily frightened, do not have tremors in hands, feels nervous, tense, or worried, does not have bad digestion, thinks clearly, has not been feeling sad lately, has not cried more than usual, has no difficulty performing daily activities with satisfaction, has no difficulty making decisions, has no difficulties in the service, is able to play a useful role in his life, is interested in things, does not feel useless, has no idea of ending life, does not feel tired all the time, has no sensations unpleasant in the stomach and does not get tired easily. Regarding the questionnaire score, 30% of the sample has a score greater than or equal to 7, with a lower mental disorder screantin.

## **DISCUSSION**

According to the findings of this study, about 30% of the sample had a positive score on the SQR-20, triggering a psychosocial impact on the lives of workers at health facilities. In this study, the variable of having

a previous diagnosis of mental disorder, about 27%, resulted in part having a risk of mental disorder assessed by the SQR-20 *screening*, which is also corroborated to contribute to a mental condition already discussed by others. authors (DUARTE, et al., 2020).

Through the questionnaires, participation was higher among females, about 89%, in addition to being in an age group between 35 and 60 years in 66%, as already demonstrated in studies. Other research shows the correlation between the age of 35 and 36 years being more likely to develop symptoms of anxiety and depression due to the COVID-19 outbreak and thus, the findings of psychosocial impacts are confirmed (FRANÇA, *et al.*, 2021). Regarding income, about 66% of the workers studied have an income of up to two minimum wages, which are classified as low income (PAZ DE LIMA, 2015).

Indeed, the factors associated psychosocial stress during the COVID-19 pandemic show that more than 70% of the sample were afraid of being infected by the virus, felt worried when a family member needed to leave the home and interfered with routine during social isolation. Also, more than 40% of workers had changes in their sleep pattern after the pandemic, had difficulty concentrating and the virus interfered with their daily routine. This brought clinical and social impacts that had repercussions on social distancing with harmful follow-up on mental health, such as depressive characteristics, irritability, insomnia, fear, anxiety and stress (MALTA, et al., 2020). In addition, the social distancing of COVID-19 has taken on a greater proportion due to fear and insecurity of the spread of the virus that has reached psychopathological damage (LIMA, 2020).

In addition to highlighting the psychosocial impact of the COVID-19 pandemic on primary care health workers, these data agree with the high prevalence of impacts on

different health professionals who are on the front line being affected by mental symptoms. Considering the population of health workers, studies in Wuhan and other regions of China showed that more than 40% of the sample had symptoms of anxiety, depression and insomnia with an unfavorable risk for mental disorders(LIRA, et al., 2021).

The SRQ-20 questionnaire is an instrument that has shown good sensitivity and specificity proposed by the World Health Organization to detect psychiatric morbidity in the general population, with some authors adopting the common mental disorder as suggestive when the score is greater than or equal to 7 for both. the sexes (PAZ DE LIMA, 2015). In this sample studied, it was evidenced that more than 40% have frequent headaches, are easily scared, feel nervous and/or worried, feel tired all the time and get tired easily, resulting in a *screening* than 30% of the population with a score greater than or equal to 7.

Hypotheses were raised to explain the high prevalence of the psychosocial impacts of COVID-19 on health workers. According to Teixeira et al. Health workers are directly and indirectly involved through exposure by their own work activity with risks of contamination, neglect of personal protective equipment that leads to psychological and social consequences such as fatigue and stress. Correlating with primary care that is the gateway to the community and direct access to workers, they could not be more exposed to coronavirus viral infection and psychological pressure, with an effect on greater interference in mental health.

Furthermore, there are still extrapulmonary complications, the main ones being those related to the neurological system. Problems such as delirium, agitation, depression, anxiety, sleep disorders, stroke and meningoencephalitis have already been documented (BRASIL, 2021). Thus, several

factors can act individually or together to contribute to this high prevalence rate of psychopathological problems found.

Finally, in relation to the last independent behavioral variables, 61.5% of the population studied met the IPAQ criteria as active. Regarding the consumption of alcoholic beverages, about 48% of workers who use alcoholic beverages, of these 68%, continued drinking the same thing or increased consumption during this period.

The present study has noteworthy limitations. The difficulty in finding studies in this line of research, the short period of time for data collection, the refusal to answer the questionnaires because they are in the work environment, the discontent in answering questionnaires on the internet are factors that affect the study quantitatively and for this reason. reason requires further studies on this topic. In addition, as it is a cross-

sectional study carried out in the Center-South of Bahia, the population evaluated may not correspond to the reality of primary care workers at the national level. However, the results must be analyzed with caution since many data corroborate with studies already carried out with the same line of research.

The study revealed that about 30% of healthcare workers had a positive score on the SQR-20. The factors associated with psychosocial stress during the pandemic were: fear of being infected by the virus, concern about the family member leaving the home and routine interference with social isolation. How the COVID-19 pandemic has negatively interfered with healthcare workers, especially those in primary care, generating psychosocial impacts, it is necessary to develop public policies aimed at early identification and installation of support measures and treatment aimed at this population.

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