Burnout Syndrome in COVID-19: an analysis of physicians from the public and private health system in the state of Sergipe

Síndrome de Burnout na COVID-19: uma análise dos médicos da rede pública e privada no estado de Sergipe

Síndrome de Burnout en COVID-19: un análisis de médicos de la red pública y privada en el estado de Sergipe

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Abstract

Objective: To compare the incidence of Burnout Syndrome (BS) among public and private physicians in Sergipe-Brazil, during the fight against COVID-19, investigating the relevance of the public and private work environment in the development of the disease. Methodology: Analytical study of a quantitative, cross-sectional nature, involving 86 doctors working directly with COVID-19 in Sergipe. An online, self-administered, objective and anonymous questionnaire was used, with questions composed by the Maslach Burnout Inventory. The positivity of the syndrome was compared among physicians from the public, private and both services, evaluating the prevalence of the three dimensions of BS in each one. Pearson chi-square, Shapiro-Wilks and Kruskal-Wallis tests were used. Results: 81.5% of those working in public service were positive for Burnout, compared to 33.3% in private sector. In the public sector, there was a predominance of high levels of emotional exhaustion (14.8%) and cynicism (14.8%). The lowest

rates of emotional exhaustion (47.6%), cynicism (90.5%) and the highest rates of work effectiveness (85.7%) were in private service. In the analysis of odds ratio, exclusive performance in private hospitals decreased chances of BS, in relation to public hospitals. Conclusion: There was a predominance of BS in public service workers and exclusive performance in private hospitals decreased chances of BS, contributing to the hypothesis that public service is a determining factor in the development of the syndrome. To prevent and intervene in the illness of physicians, it is necessary to transform the current Brazilian public health reality and, thus, the work environment of these professionals.

Keywords: Burnout syndrome; Occupational stress; Covid-19; Physicians.

Resumo

Objetivo: Comparar a incidência da síndrome de Burnout (SB) entre médicos da rede pública e particular em Sergipe - Brasil, durante o combate à COVID-19, investigando a relevância do ambiente público e privado de trabalho no desenvolvimento da doença. Metodologia: Estudo analítico de natureza quantitativa, transversal, envolvendo 86 médicos trabalhando diretamente com o COVID-19 em Sergipe. Utilizado questionário online, autoaplicável, objetivo e anônimo, com questões compostas pelo Maslach Burnout Inventory. Comparou-se a positividade da síndrome entre médicos do serviço público, privado e de ambos, avaliando a prevalência das três dimensões da SB em cada um. Utilizou-se os testes Qui-Quadrado de Pearson, Shapiro-Wilks e Kruskal-Wallis. Resultados: 81,5% dos atuantes no serviço público obtiveram positividade para Burnout, comparado a 33,3% do particular. No setor público, houve predomínio de altos níveis de exaustão emocional (14,8%) e de cinismo (14,8%). As menores taxas de exaustão emocional (47,6%), cinismo (90,5%) e as maiores de eficácia no trabalho (85,7%) foram no serviço privado. Na análise de razão de chances, atuação exclusiva em hospitais particulares diminuiu as chances de SB, em relação aos hospitais públicos. Conclusão: Houve predominância da SB nos trabalhadores do serviço público e a atuação exclusiva em hospitais particulares diminuiu as chances de SB, contribuindo para a hipótese de o serviço público ser fator determinante no desenvolvimento da síndrome. Para prevenir e intervir no adoecimento de médicos, é necessário transformar a realidade saúde pública brasileira vigente e, assim, o ambiente de trabalho desses profissionais.

Palavras-chave: Síndrome de Burnout; Estresse ocupacional; Covid-19; Médicos.

Resumen

Objetivo: Comparar la incidencia del Síndrome de Burnout (SB) entre médicos públicos y privados en Sergipe -Brasil, durante la lucha contra la COVID-19, investigando la relevancia del ambiente de trabajo público y privado en el desarrollo de la enfermedad. Metodología: Estudio analítico de carácter cuantitativo, transversal, en el que participaron 86 médicos que trabajan directamente con la COVID-19 en Sergipe. Se utilizó un cuestionario en línea, autoadministrado, objetivo y anónimo, con preguntas compuestas por el Maslach Burnout Inventory. Se comparó la positividad del síndrome entre médicos del sector público, privado y de ambos servicios, evaluando la prevalencia de las tres dimensiones del SB en cada uno. Se utilizaron las pruebas chi-cuadrado de Pearson, Shapiro-Wilks y Kruskal-Wallis. Resultados: 81,5% de los que trabajan en el servicio público fueron positivos para Burnout, frente al 33,3% en el sector privado. En el sector público, hubo un predominio de altos niveles de agotamiento emocional (14,8%) y cinismo (14,8%). Los menores índices de agotamiento emocional (47,6%), cinismo (90,5%) y los mayores índices de eficacia en el trabajo (85,7%) se dieron en el servicio privado. En el análisis de razón de momios, trabajar exclusivamente en hospitales privados redujo las posibilidades de SB en comparación con los hospitales públicos. Conclusión: Hubo predominio del SB en trabajadores de la función pública y el trabajo exclusivo en hospitales privados redujo las posibilidades de SB, contribuyendo a la hipótesis de que la función pública es un factor determinante en el desarrollo del síndrome. Para prevenir e intervenir en la enfermedad de los médicos, es necesario transformar la actual realidad de la salud pública brasileña y, por lo tanto, el ambiente de trabajo de estos

Palabras clave: Síndrome de Burnout; Estrés laboral; Covid-19; Doctores.

1. Introduction

Burnout is a syndrome defined by three main components: emotional exhaustion, depersonalization and decreased sense of personal accomplishment. It is characterized by a resulting process from the work stress chronicity and occurs relatively frequently in professions that are in direct contact with their users and require intense care from other people, such as doctors (Maslach & Leiter, 2017; Rotenstein et al., 2018).

Medical professionals often experience high workload, insufficient time to deal with occupational challenges, need to keep up with a rapidly evolving knowledge base and lack of interpersonal support in everyday life (De Simone et al., 2019). According to Sultana et al (2020), such challenges potentially lead to emotional exhaustion, in which the individual feels overwhelmed and discouraged from completing their tasks. Depersonalization follows emotional exhaustion and is understood

as cold, indifferent and rigid attitudes expressed towards other people during work, which may be accompanied by a decreased sense of self-efficacy and competence (Sultana et al., 2020). Such a mental state characterizes the Burnout Syndrome (BS), a growing concern for the global health community.

During the height of the pandemic caused by the new coronavirus, one of the biggest health challenges on a global scale of this century, work dynamics of health professionals belonging to the front line underwent intense and abrupt changes, marked by exponential growth of cases, exceeding institutional capacities, reduction of the team due to fear of becoming infected or the illness itself, shortage of resources and personal protective equipment, salary delay, due to directing of government resources to other investments during the period of health and socioeconomic crisis (Gualano et al., 2021; Jung et al., 2021). Until April 2022, approximately two and a half years after the beginning of the pandemic in China in 2019, there were about six million deaths from COVID-19 in the world, 664 thousand of them located in Brazil, currently the second country with the highest number of deaths from the disease (Our World in Data Coronavírus [OWIDCORONAVIRUS], 2022). The country was also responsible for a third of all deaths due to SARS COV-2 infection among healthcare workers worldwide in 2021 (Conselho Federal de Enfermagem [COFEN], 2021). In Sergipe, doctors experienced results of long working hours, working conditions incompatible with adequate patient care, feelings of mental exhaustion and fatigue and social expectation of infallibility. During January until May of 2021, starting the second year of pandemic, the brazilian state was facing an intense second wave of new coronavirus, the emergence of new and more transmissible variants of SARS-CoV-2, the continuity of restrictive measures, first vaccines were being instituted and the number of deaths from the disease still had not reached decline yet. Sergipe stood out during the course of pandemic in the country, gathering, until April 2022, an average of 327 thousand cases and approximately six thousand deaths (OWIDCORONAVIRUS, 2022). The increase in working hours, possibly associated with sleep deprivation, daily contact with deaths, frequent transmission of bad news, fear of being infected and risk of transmitting the disease to family and friends, together with social distancing, configure a state of emotional distress and, therefore, a risk factor for the increase in cases of Burnout Syndrome in physicians (Chirico et al., 2021).

According to Heponiemi et al (2011), doctors working in private sector had higher levels of job satisfaction and organizational commitment and lower levels of psychological distress and sleep problems when compared to doctors in public sector. Work within a public facility faces different sources of stress, such as working under suboptimal conditions, salary delays, insufficient sanitation infrastructure, limited health budgets, and the need to make daily triage decisions due to "rationing" of resources. This was already an established scenario within the marginalized reality of Brazilian public health. With the pandemic and the emergence of an even more absurd demand for resources for an already fragile health system, the medical professional began to face a chaotic scenario and to deal with numerous moral and ethical conflicts. Updated data, many from developed nations, highlight that marginalized populations, such as racial and ethnic minorities – the main users of the public health system – are more likely to be infected and face difficulties in accessing health care, as long as achieving a favorable outcome in their condition (Wood, 2020). This fact can be profoundly challenging for doctors trying to cope with the rapid increase in new cases and deaths every day of this pandemic. Despite their dedication, structural inequalities can affect the mental health of these professionals and forsake them in the face of challenges closely related to social justice and human rights (Dzeng & Wachter, 2020).

In Brazil, investigations with physicians are scarce, therefore, the objective was to compare the estimated incidence of Burnout syndrome between physicians working in public and in private health system in the state of Sergipe, during their services on the front line in the fight against COVID-19, investigating the relevance of the type of work environment (public or private) in the development of the syndrome and identifying the prevalence of BS three dimensions (emotional exhaustion, depersonalization and personal fulfillment) within each type of institution.

2. Methodology

This is an analytical, quantitative, cross-sectional study involving physicians who work directly with COVID-19 in the state of Sergipe, Brazil. A non-probabilistic, consecutive and convenience sampling was used, consisting of 86 professionals working in public and private services in the state, communicated via telephone or e-mail. Data collection was carried out between January and May 2021 through an online, self-administered, objective and anonymous questionnaire The questionnaire was divided into three parts: the first with exposure of the Free and Informed Consent Term (FICT); the second, with six questions composed by epidemiological (age, gender, marital status, presence of children) and professionals (place of work, length of professional experience) data; and the last one, presenting 16 questions that make up the multidimensional assessment of BS. The BS assessment was performed using the Maslach Burnout Inventory General Survey, translated and adapted by Legal (2007), which analyzes the three dimensions of the syndrome: Emotional Exhaustion (EE), with six variables, Cynicism (CI), four variables and Work Effectiveness (ET), six variables. The questions had responses based on the Likert scale, ranging from zero to six – from "never" to "every day". In Brazil, these subscales have not yet been subjected to analysis and validation, however, originally, the scale is calculated from the score obtained in each subscale. Therefore, an adaptation of the Maslach Burnout Inventory (MBI) interpretation was made and it was determined, for Emotional Exhaustion (EE): high level > 19 points, moderate level = 12-18 and low level < 11; for Cynicism (CI): > nine as high level, five-eight as moderate and < four as low level; for Work Effectiveness (ET): scores of zero-22 indicated high level, 23-27 moderate level and > 28 low level. There is no consensus in the literature for the diagnosis of Burnout syndrome, therefore, positivity for the syndrome was defined as the identification of a high level in at least one of these three dimensions.

Data analysis focused on the comparison of the syndrome positivity rates among the group of medical professionals who answered to work in public, private or both types of institutions in the socio-demographic questionnaire, evaluating the prevalence of the three dimensions of BS (emotional exhaustion, depersonalization and work effectiveness) within each work environment (public and private). From the data collected, the hypothesis of a higher risk of developing the syndrome was raised within the group working mainly in the public health service.

Categorical variables were described using absolute and relative percentage frequencies. Continuous variables were described using median and interquartile range. The hypothesis of independence between categorical variables was tested using Pearson's Chi-Square test. The hypothesis of adherence of continuous variables to the normal distribution was tested using the Shapiro-Wilks test. Once not confirmed, the hypothesis of equality of distributions between three or more samples was tested using the Kruskal-Wallis test. Regression coefficients were estimated and adjusted for the type of institution associated with the Maslach dimensions and also odds ratios for the positive symptoms of Burnout, with the control variables for age group, gender, marital status, children and length of professional experience. The software used was R Core Team 2021 (Version 4.1.0) and the significance level adopted was 5%. The results were expressed in absolute, relative and percentage terms, represented by tables and graphs.

3. Results

As shown in Table 1, 81.5% of those working in public health service had positive symptoms for Burnout, while 33.3% of workers only at private institutions had positive symptoms and 59% of those working in both types of service scored positively for syndrome, demonstrating high results, as expected in the face of a pandemic situation and the use of a score previously made for analysis during a common period. Among professionals working exclusively in public sector, there was a predominance of high levels of emotional exhaustion (14.8%) and cynicism (14.8%). As for the exclusive performance in the private sector, there was a predominance of high emotional exhaustion (33.3%) and no high scores were identified in the

effectiveness at work dimension. Among the professionals working in both types of institutions, there was a high rate of emotional exhaustion (30.8%), followed by low effectiveness at work (12.8%).

The lowest rates of emotional exhaustion (47.6%), cynicism (90.5%) and the highest rates of effectiveness at work (85.7%) were obtained within the group working exclusively in private services. The highest rates of cynicism (14.8%) and low effectiveness at work (12.8%) were obtained in workers exclusively in the public service and in both services, respectively.

Table 3 shows the data on the odds ratio for positive burnout symptoms, in which the group working only in the public service was used as a reference, while professionals only from private health institutions were placed as an exposed group. In the private service, the result was 0.11, indicating that working exclusively in private hospitals reduces the chances of burnout syndrome, compared to public hospitals.

Table 1. Results of Burnout Syndrome (BS) according to the type of institution.

| | Type of Insti | | | |
|------------------------------------|---------------|------------|--------------|---------------------|
| | Public | Private | Both | • |
| | n (%) | n (%) | n (%) | p-value |
| Age, Median (IIQ) | 26 (25-36) | 31 (27-32) | 29 (26-39) | 0,271 K |
| Age , n (%) | | | | |
| <=35 | 19 (70,4) | 17 (81,0) | 26 (66,7) | 0,517 ^Q |
| >35 | 8 (29,6) | 4 (19,0) | 13 (33,3) | |
| Gender , <i>n</i> (%) | . , , | . , , | ` ' ' | |
| Female | 18 (66,7) | 11 (52,4) | 20 (51,3) | 0,451 ^Q |
| Male | 9 (33,3) | 10 (47,6) | 19 (48,7) | Ź |
| Marital status, n (%) | , , , | , , , | . , , | |
| Single | 19 (70,4) | 6 (28,6) | 26 (66,7) | 0,003 ^{Q*} |
| Married | 8 (29,6) | 13 (61,9) | 13 (33,3) | Ź |
| Widower | 0 (0,0) | 2 (9,5) | 0 (0,0) | |
| Children?, n (%) | - (-,-, | (- ,-) | . (-,-, | |
| Yes | 9 (33,3) | 7 (33,3) | 12 (30,8) | 1,000 ^Q |
| No | 18 (66,7) | 14 (66,7) | 27 (69,2) | , |
| Professional experience, n (%) | - (,- | (,, | (, / | |
| Less than 5 years | 17 (63,0) | 12 (57,1) | 23 (59,0) | 0,954 ^Q |
| 5-10 years | 4 (14,8) | 5 (23,8) | 7 (17,9) | Ź |
| More than 10 years | 6 (22,2) | 4 (19,0) | 9 (23,1) | |
| Burnout symptoms, n (%) | , , , | . , , | , , , | |
| Yes | 22 (81,5) | 7 (33,3) | 23 (59,0) | 0,005 ^{Q*} |
| No | 5 (18.5) | 14 (66,7) | 16 (41,0) | Ź |
| Emotional exhaustion, Median (IIQ) | 19 (10-29) | 12 (9-16) | 16 (12,5-23) | $0,142^{K}$ |
| Emotional exhaustion, n (%) | , | ` / | . , , | Ź |
| Low | 8 (29.6) | 10 (47,6) | 9 (23,1) | 0,070 ^Q |
| High | 4 (14,8) | 7 (33,3) | 12 (30,8) | ŕ |
| Moderate | 15 (55,6) | 4 (19,0) | 18 (46,2) | |
| Cynicism, Median (IIQ) | 4 (1,5-10) | 1 (0-2) | 2 (0-7) | 0.012^{K*} |
| Cynicism,, n (%) | | , , | , | ŕ |
| Low | 15 (55,6) | 19 (90,5) | 28 (71,3) | 0,122 ^Q |
| High | 4 (14,8) | 1 (4,8) | 4 (10,3) | Ź |
| Moderate | 8 (29,6) | 1 (4,8) | 7 (17,9) | |
| Work Efficiency, Median (IIQ) | 21 (11,5-29) | 32 (30-33) | 32 (24,5-34) | <0,001 K* |
| Work Efficiency, n (%) | . , . , | , -, | ` ' ' | , |
| Low | 8 (29,6) | 18 (85,7) | 25 (64,1) | 0,001 ^{Q*} |
| High | 3 (11,1) | 0 (0,0) | 5 (12,8) | , |
| Moderate | 16 (59,3) | 3 (14,3) | 9 (23,1) | |

Caption: n-absolute frequency. %-percentage relative frequency. IIQ – Interquartile range. K-Kruskal-Wallis test. Q – Pearson 's Chi Square Test. * p<0,05. Source: Authors.

Table 2. Regression model of the three dimensions of Burnout Syndrome according to the type of institution.

| | B (IC95%) | p-value | Badj (IC95%) | p-value |
|-----------------------------|----------------------|---------|----------------------|---------|
| Emotional exhaustion | | | | |
| Public | 1 | | 1 | |
| Private | -5,21 (-10,36;-0,47) | 0,048 | -8,76 (-13,93;-3,61) | 0,001 |
| Both | -1,39 (-5,83;3,05) | 0,538 | -1,07 (-4,91;2,77) | 0,584 |
| Cynicism | | | | |
| Public | 1 | | 1 | |
| Private | -4,77 (-7,61;-1,92) | 0,001 | -6,19 (-9,43;-2,95) | < 0,001 |
| Both | -2,84 (-5,29;-0,39) | 0,023 | -2,68 (-5,09;-0,27) | 0,029 |
| Work Efficiency | | | | |
| Public | 1 | | 1 | |
| Private | 8,99 (4,32;13,67) | < 0,001 | 9,59 (4,88;14,30) | < 0,001 |
| Both | 7,34 (3,32;11,36) | < 0,001 | 7,28 (3,77;10,78) | < 0,001 |

 $\label{eq:caption:B-Regression coefficient. Badj-Regression coefficient adjusted for age group, gender, marital status, children and length of professional experience. IC95\%-Interval with 95\% confidence. Source: Authors.$

Table 3. Odds ratio of positive symptomatology for Burnout according to the type of institution.

| | OR (IC95%) | p-value | OR _{adj} (IC95%) | p-value |
|-------------------------------------|------------------|---------|---------------------------|---------|
| Positive symptomatology for Burnout | | | | |
| Public | 1 | | 1 | |
| Private | 0,11 (0,03-0,43) | 0,001 | 0,07 (0,01-0,35) | 0,001 |
| Both | 0.33 (0.10-1.04) | 0.059 | 0.32 (0.10-1.08) | 0.066 |

Caption: OR - Odds Ratio. $OR_{adj} - Odds$ ratio adjusted for age group, gender, marital status, children and length of work experience. IC95% – Interval with 95% confidence. Source: Authors.

4. Discussion

Despite the existence of a universal public health system in Brazil, the COVID-19 pandemic severely tested the resilience of the Brazilian health system and preparedness for pandemics. The health system was already fragile when it was overwhelmed by COVID-19 in March 2020, after years of austerity and scrapping by the government, which resulted in health services deficient in professional staff, resources and assistance.

According to the data obtained, prevalence of Burnout Syndrome was more evident in doctors who work in public hospitals (81.5%) than in private hospitals (33.3%) in Sergipe. This is also reflected in the MBI subscales scores, higher in emotional exhaustion and cynicism/depersonalization, as demonstrated in a study in Mexico, comparing the performance of medical trainees in public versus private hospitals (Miranda-Ackerman et al., 2019). The lower staff and inadequacy of physical resources, greater patient demand, long labor hours, excessive work load and lack of organization and planning in the public hospitals compared with the private hospital might have contributed to the higher prevalence of burnout syndrome (Mendes-Rodrigues et al., 2017). Another study carried out in Rio Grande do Sul among nursing professionals from public and private hospitals showed, for the Personal Achievement and Emotional Exhaustion dimensions and for the general mean of the construct, that employees of public hospitals had a higher incidence of Burnout, in relation to employees of private hospitals (Andrade et al., 2012).

According to the work developed by Tamayo and Tróccoli (2002), organizational support is the variable that best predicts and influences aspects of Burnout, such as emotional exhaustion. Furthermore, it was found that high scores of emotional exhaustion were related to the perception of low organizational support. In this way, emotional exhaustion can be reduced by improving social support from colleagues and supervisors and by regulating the organization's work process, through clear policies for disseminating information, updating and planning.

A study in a French public hospital showed a direct association between structural violence and physician burnout. Structural violence occurs when a social institution can harm people by preventing them from meeting their basic needs. In

such results, these basic needs could be related to a lack of dialogue, meaning or recognition, in addition to psychological pressure, harassment or constant conflicting interactions (Sibeoni et al., 2021).

On the other hand, a study with oncologists found a connection between working exclusively in public institutions and lower levels of emotional exhaustion. It was suggested that for these professionals, it was rewarding to work with students as part of the work in hospitals and public institutions and that these institutions were places that offered less bureaucracy and greater creative freedom for professionals. In this study, 77.61% of the physicians interviewed reported administrative problems as stressors in the workplace (Tucunduva et al., 2006). Another study at a public university in Brazil also pointed the presence of medical education as a positive factor at work, as it would be associated with continuity of learning and updating, feeling useful, having the possibility of amply practicing Medicine and participating in training other physicians (Duarte et al., 2020). In the pandemic context, the public service would still not have this protective factor related to medical education, as medical internships were suspended and the movement of students was restricted within the COVID frontline service units.

The percentage of the syndrome in the present study was also considerably higher than found in other studies (Kane, 2020; Rotenstein et al., 2018; Shanafelt et al., 2012), which could be justified by the current pandemic context in Sergipe during the period of study, associated with potentiation of existing stressors, in accordance with other analyzes carried out during the period (Batra et al., 2020; Duarte et al., 2020; Hua et al., 2020). In addition, the scores chosen to define BS were scaled for application during a common period, unlike the atypical pandemic context under study. Therefore, such analysis also contributed to the intensification of results obtained. In Spain, compared to non-frontline healthcare workers, frontline workers felt more burnout during the pandemic than before the COVID-19 crisis (Torrente et al., 2021). The results of a survey carried out in Indonesia, one month after the COVID-19 outbreak, showed that burnout due to patients is greater than that one captured in personal and work dimensions, indicating that patients with COVID-19 can become a trigger for burnout in healthcare professionals (Sunjaya et al., 2021).

As for the exclusive performance in the private sector, there was a predominance of high emotional exhaustion (33.3%) and no high score was identified in the effectiveness at work dimension. Furthermore, within this group, the lowest rates of emotional exhaustion (47.6%), cynicism (90.5%) and the highest rates of effectiveness at work (85.7%) were identified. In the analysis of the odds ratio for the development of BS among workers in the public and private service, the OD was equal to 0.11, establishing the hypothesis that working exclusively in private hospitals reduces chances of burnout syndrome, in relation to public hospitals.

A Finnish study by Heponiemi et al (2010) found that private physicians had higher job satisfaction, greater organizational commitment, and lower stress compared to physicians in public hospitals. This difference could be attributed to the higher level of organizational fairness and better management experienced by private doctors (Hafiz et al., 2018). Within the context of the global health crisis, it is inferred that the private health system could have had better conditions to face the COVID-19 outbreak, in the sense of having greater investments, more organized teams and broader medical resources. This hypothesis is reflected in the absence of high scores in the ET dimension, that is, the professional of private institutions in the present research remained aware of their effectiveness, competence and positive impact of their work. However, like the general health system, the private sector also suffered the impact of an unprecedented pandemic, which is reflected by the significant rate of BS in its midst (33.3%) and the predominance of Emotional Exhaustion (33.3%).

Studies comparing the prevalence of BS between public and private services during the COVID-19 pandemic are still incipient. Many address the increased incidence of the disease during the height of the pandemic (Cabral et al., 2021; Kwaghe et al., 2021; Liu et al., 2021) and others demonstrate the higher prevalence of occupational stress in public services, in a way general (Chegini, 2019; Miranda-Ackerman et al., 2019; Pires et al., 2018), however, the association has not yet been well established in the literature. The current study therefore needs further research on the subject so that the hypothesis is

corroborated.

5. Conclusion

It is important to know that an important element of burnout syndrome is the negative impact on work performance, resulting in potentially harmful consequences for patients (Dyrbye & Shanafelt, 2016; Soares et al., 2021). In addition to implying the provision of suboptimal care and medical errors, stress and burnout are related to the desire of abandoning the practice and are, therefore, an issue about human resources mainly for the public health system, since such an environment seems to bring the greatest risk of disease development.

The sample of the work presented shows that 81.5% of those working in the public health service during the COVID-19 pandemic had positive symptoms for Burnout, compared to 33.3% of workers only in private institutions. The lowest rates of emotional exhaustion (47.6%), cynicism (90.5%) and the highest rates of effectiveness at work (85.7%) were obtained within the group working exclusively in private services and, in the analysis of the ratio of chances, it was indicated that exclusive performance in private hospitals reduces chances of burnout syndrome, in relation to public hospitals (OD = 0.11) during this period. Such data contributes to the hypothesis that public health service may have been a determining factor for the development of the syndrome and for consequent damage to mental and emotional state of the professional during the height of pandemic. An altered emotional state, such as the one presented, can mitigate cognitive abilities such as memory, interpretation of information and acquisition of skills (McConnell & Eva, 2012). From this perspective, further studies are needed to assess this hypothesis that public environment could contribute to the development of burnout in our current and future doctors.

In January 2022, Brazilian Ministry of Health started to consider Burnout Syndrome as an occupational disease, reaffirming the need to recognize it as a public health issue. In order to prevent future physicians from falling ill and help to reverse the situation of those affected by the disease today, it is first necessary to transform the reality of the current situation within brazilian public health and, thus, the work environment of these professionals. A serious and well-formulated policy of investments in health, the optimized use of financial resources for the delivery of satisfactory services to the community and that guarantee a decent work infrastructure and professional valorization, associated with elaboration of projects that address the workload and conditions of work and psychological well-being can reduce the incidence of Burnout in physicians in the public system. Recognition and awareness by the profession itself about the serious problems arising from stress and burnout can be important in dealing with the disease. Suggested strategies include tracking the syndrome among professionals, devising better work schedules, introducing coping mechanisms along with techniques to manage stress and other context-specific approaches (Barbosa et al., 2021; Gomez, et al., 2020).

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