Burnout Syndrome in Teachers of Health Sciences in Chachapoyas

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KEYWORDS
Burnout Syndrome
Depersonalization
Health Sciences
Faculty
Occupational Stress
Emotional Stress
Emotional Exhaustion

ABSTRACT
The research sought to determine the prevalence of Burnout Syndrome in health teachers at a university in north-eastern Peru. The universe was made up of 69 teachers, and 41 responded to the self-administered instrument called Maslach Burnout Inventory. The results show that 14.6% present this syndrome. The highest indicator was personal fulfillment, while depersonalization and emotional exhaustion were low. According to gender, in both it was similar. According to age group, it had a greater effect in ages between 36 and 51 years. Marital status was more prevalent in singles. We conclude that the prevalence of Burnout Syndrome was low.

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1. Introduction

According to the World Health Organization, the new epidemic of the 21st century will be work-related stress (Twafik et al., 2019), which has become an increasingly frequent phenomenon. Consequently, to the exhaustion and burnout caused by an ever-increasing excess of requirements and/or demands, a new process called Burnout Syndrome (BS) arises. The psychological response of professionals to prolonged work stress is known as SB (Rodriguez et al., 2017).

Situations of chronic stress are common in the work environment and burnout emerges as a psychosocial phenomenon that harms the health of individuals and the organization of work, as well as constituting a psychosocial risk for other pathological processes (Kesavan & Vinita, 2022). Because of its undesirable implications, SB can be considered a public health problem (Lauracio & Lauracio, 2020).

According to Freundenberger, this syndrome has more impact on clinical professionals (Zayed & Morsy, 2022), because health science careers require dedication, so that as time passes the individual may feel frustrated, exhausted and even feel anger, which will lead to the extinction of motivation, especially when not always achieve the desired results.

During the confinement due to Covid-19, a significant increase in the frequency of burnout syndrome was reported (Antoniadou, 2022), particularly in health care workers, since they were in direct contact with infected patients and patients who reached the ICU area, due to the collateral damage caused by the coronavirus. The situation was no less complicated for dentists in private practice, since they had to adapt to the new biosecurity measures, which could have been an important factor in the increase of burnout syndrome. But it was not only reflected in health professionals, also the student population and teachers, according to several studies, were affected during this period, and even before this period they showed the characteristic symptoms of this syndrome. The main cause may have been the radical change in teaching methodology, which led both the student community and teachers to gradually show discomfort such as mental exhaustion, stress, anxiety, frustration and even feelings of anger at not being able to achieve all the desired objectives.

Multiple studies have been conducted on this syndrome before, during and after the epidemic caused by SARS-CoV-2, and all of them were focused on evaluating the prevalence of this syndrome in different study populations. Our country was no stranger to the problem, so several researchers focused their studies on the impact of this syndrome on health workers, the student population and teaching staff. Based on the studies carried out in Peru on the impact on teachers, the figures vary according to the academic degree and sociodemographic particularities of the populations evaluated. In Fernandez’s research (2022), 43.2% of teachers in Lima were found to have high levels of burnout in a list of 10 studies conducted in the capital. In Arequipa, it was revealed that there are several sources of Burnout risk, and that teachers have psychosocial risks that negatively impact their health (Fernandez, 2022).

At the local level, different counterproductive attitudes have been observed in the teachers of the Faculty of Health Sciences of the UNTRM, without obtaining details about it. This problem has motivated to dedicate efforts to elaborate this research and thus be useful as a basis for future research of any kind, in order to contribute to the population. The purpose of the work was to determine the prevalence of Burnout Syndrome in teachers of the Faculty of Health Sciences of the Universidad Nacional Toribio Rodríguez de Mendoza de Amazonas (UNTRM).

2. Material and methods

We conducted a study with a quantitative approach, at a descriptive level, considering the participation of the researcher it was observational, according to the data recording plan it was prospective, according to the number of moments in which the study variable was measured it was cross-sectional and according to the number of variables of interest it was univariate analysis.

Using the data provided by the Directorate of Admissions and Academic Records (DAYRA) of the UNTRM, the number of teachers of the Faculty of Health Sciences for the 2020-II academic semester is 69.

To collect the information, Maslach Burnout Inventory was used as an instrument, which was built by 22 questions on a likert scale, including three dimensions of SB, with 9 items for emotional
exhaustion, with 5 items for depersonalization and with 8 items for personal fulfillment. Being the reliability indexes for personal realization of 0.71, for depersonalization of 0.79 and for emotional exhaustion of 0.90.

The information was processed using the SPSS Version 23 statistical analysis program and Microsoft Excel for the preparation of tables.

3. Results

Of the total number of teachers, 85.4% reported an absence of SB (Table 1).

Table 1: Prevalence of Burnout Syndrome in health teachers UNTRM - 2020.

<table>
<thead>
<tr>
<th>Prevalence of Burnout Syndrome</th>
<th>Teachers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnout Syndrome</td>
<td>6</td>
<td>14.6</td>
</tr>
<tr>
<td>Absence of Burnout Syndrome</td>
<td>35</td>
<td>85.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>41</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Oblitas, 2020

Analyzing the studied dimensions of SB, we found that 78.0% obtained a low value for emotional exhaustion, 87.8% obtained a low value for depersonalization, and finally, 90.2% obtained a high value for personal fulfillment (Table 2).

Table 2: Prevalence of Burnout Syndrome according to its dimensions in health teachers UNTRM - 2020.

<table>
<thead>
<tr>
<th>Trend according to dimensions</th>
<th>CE</th>
<th></th>
<th>D**</th>
<th></th>
<th>RP***</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>fi</strong></td>
<td><strong>%</strong></td>
<td><strong>fi</strong></td>
<td><strong>%</strong></td>
<td><strong>Fi</strong></td>
<td><strong>%</strong></td>
<td></td>
</tr>
<tr>
<td>Under</td>
<td>32</td>
<td>78.0</td>
<td>36</td>
<td>87.8</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>Medium</td>
<td>6</td>
<td>14.6</td>
<td>5</td>
<td>12.2</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>High</td>
<td>3</td>
<td>7.4</td>
<td>0</td>
<td>0.0</td>
<td>37</td>
<td>90.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>41</strong></td>
<td><strong>100</strong></td>
<td><strong>41</strong></td>
<td><strong>100</strong></td>
<td><strong>41</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Oblitas, 2020

*EC = Emotional Fatigue
**D = Depersonalization
***RP = Personal Realization

The female sex presented mild SB in 7.3% and the male sex presented mild SB in 4.9%, which reflects that the majority of people in both genders presented mild SB (Table 3).

Table 3. Prevalence of Burnout Syndrome according to sex in health teachers UNTRM - 2020.

<table>
<thead>
<tr>
<th>Burnout Syndrome</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>fi</td>
<td>%</td>
<td>fi</td>
<td>%</td>
</tr>
<tr>
<td>Slight</td>
<td>3</td>
<td>7.3</td>
<td>2</td>
</tr>
<tr>
<td>Moderate</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Severo</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Absence of Burnout Syndrome</td>
<td>14</td>
<td>34.1</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>41.5</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

Source: Oblitas, 2020

Teachers between 25 and 35 years old presented a percentage of 2.4% in the mild degree, while those between 36 and 50 years old presented the highest percentage with 7.3% in the mild degree,
finally the age group from 51 to more years old presented only 2.4 % in the mild degree of Burnout (Table 4).

### Table 4. Prevalence of Burnout Syndrome according to age in UNTRM Health teachers - 2020.

<table>
<thead>
<tr>
<th>Burnout Syndrome</th>
<th>25 to 35 years old</th>
<th>36 to 50 years</th>
<th>51 years and older</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>fi %</td>
<td>fi %</td>
<td>fi %</td>
<td>%</td>
</tr>
<tr>
<td>Slight</td>
<td>1 2.4</td>
<td>3 7.3</td>
<td>1 2.4</td>
<td>5 12.2</td>
</tr>
<tr>
<td>Moderate</td>
<td>0 0.0</td>
<td>1 2.4</td>
<td>0 0.0</td>
<td>1 2.4</td>
</tr>
<tr>
<td>Severo</td>
<td>0 0.0</td>
<td>0 0.0</td>
<td>0 0.0</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Absence of Burnout</td>
<td>10 24.4</td>
<td>10 24.4</td>
<td>15 36.6</td>
<td>35 85.4</td>
</tr>
<tr>
<td>Syndrome</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11 26.8</td>
<td>14 34.1</td>
<td>16 39.0</td>
<td>41 100</td>
</tr>
</tbody>
</table>

Source: Oblitas, 2020

The percentage of singles with a mild degree of SB was 7.3% of married people 2.4 % for both mild and moderate degree of Burnout, the percentage of widowers was 2.4 %, not showing the presence of SB in divorced people; these data reflect that single teachers predominantly present SB (Table 5).

### Table 5. Prevalence of Burnout Syndrome according to marital status in UNTRM Health teachers - 2020.

<table>
<thead>
<tr>
<th>Burnout Syndrome</th>
<th>Singles</th>
<th>Married</th>
<th>Widowers</th>
<th>Divorced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>fi %</td>
<td>fi %</td>
<td>fi %</td>
<td>fi %</td>
<td>%</td>
</tr>
<tr>
<td>Slight</td>
<td>3 7.3</td>
<td>1 2.4</td>
<td>1 2.4</td>
<td>0 0.0</td>
<td>5 12.2</td>
</tr>
<tr>
<td>Moderate</td>
<td>0 0.0</td>
<td>1 2.4</td>
<td>0 0.0</td>
<td>0 0.0</td>
<td>1 2.4</td>
</tr>
<tr>
<td>Severo</td>
<td>0 0.0</td>
<td>0 0.0</td>
<td>0 0.0</td>
<td>0 0.0</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Absence of Burnout</td>
<td>16 39.0</td>
<td>16 39.0</td>
<td>1 2.4</td>
<td>2 4.9</td>
<td>35 85.4</td>
</tr>
<tr>
<td>Syndrome</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19 46.3</td>
<td>18 43.8</td>
<td>2 4.8</td>
<td>2 4.9</td>
<td>41 100</td>
</tr>
</tbody>
</table>

Source: Oblitas, 2020

In our research it was evidenced that a small group of teachers, specifically 14.6% presented Burnout Syndrome, which indicates that there is a low prevalence of this syndrome. Regarding the prevalence of Burnout Syndrome, Cotrina & Panez (2019), reported that only 2.67% presented SB. Likewise, Flores (2016), in assistant physicians, showed that 37.29% presented BS and 67.71% did not present it. Morgado et al. (2022), obtained 24.14% of SB. Likewise, Correa-Correa et al. (2010) reported a low presence of BS. Fernandez et al. (2022) found that 37% of the total sample of university teachers showed Burnout. Correa-Correa et al. (2010), obtained similar results to ours with low presence of BS.

In contrast, Guarate et al. (2020) reported a high incidence of SB. Lugo (2019) found a higher percentage of prevalence of BS. Melendez & Tejada (2020), obtained as a result that 60% of nursing professionals presented high level of Burnout syndrome, Arpita (2016), determined that the presence of BS in this study was 51%. Estrada et al. (2022), determined that 32.1% of teachers presented high level of SB, 28.7% had moderate level, 16.2% low level, 13.4% presented very low level and 9.6% had very high level. These results may be due to the fact that as education professionals they have enough economic benefits, which motivates them to carry out their daily activities adequately and without suffering high stress. However, with respect to the influence of covid-19, we noticed that it did have a notorious influence, since it aggravated SB in the education professionals.

With respect to the dimensions, the majority presented low levels in the dimensions of emotional exhaustion 78.0% and depersonalization 87.8%, and high levels in the dimension of personal fulfillment 90.2%.
In his recent study Antoniadou (2022), on the factors causing burnout among Greek dentists before and during the pandemic period, showed that the prevalence of personal burnout was affected by gender, age, number of children, level of education and years of practice. The results obtained showed that men were more prone to unhappiness, physical and emotional exhaustion, and dissatisfaction. The main reasons that led to an increase in burnout syndrome were related to factors such as economic management, reduced staff, and reinforced biosecurity measures, which on many occasions did not allow the dentists to obtain the desired results in the treatment of their patients.

Owen et al. (2022), in their study of the impact of COVID-19 on the mental health of dentists in Wales, found high levels of stress in 82% of the respondents. Three-quarters of the respondents stated that during the pandemic they were practicing despite not feeling well mentally. Working conditions and financial pressure directly impacted the mental health of dentists. However, high levels of stress were not only evident in the dental community, but also in the health care field in general. Morgado et al. (2022), studied the impact of covid-19 on the mental health of healthcare workers during the first wave in Portugal, found that 55% (n= 844) had high levels of personal burnout related to the work they perform. Some 28.7% (n=441), expressed substantial levels of depression and stress 36.4% (n=558). Fernandez et al. (2022), found emotional exhaustion in 23%, depersonalization 16% and personal fulfillment 50%. Bedoya et al. (2017), found emotional exhaustion in 17.1% and depersonalization in 6.3% and a high percentage in personal accomplishment (40.3%).

In opposition, Cotrina & Panez (2019), found that with respect to emotional exhaustion only 6% presented a high level and depersonalization with high level only in 10%. Likewise, in the research of Melendez & Tejada (2020), according to the dimensions they obtained high percentages in emotional exhaustion 71.7%, depersonalization 70% and personal fulfillment 51.7%. Hidalgo et al. (2019), obtained high values in the areas of emotional exhaustion 88.3% and depersonalization 88.1%, but only 2.2% presented a high level of personal fulfillment. In the research by Fernández et al. (2022) and Bedoya et al. (2017), they agreed with our results because they did not show high SB scores.

Lugo (2019), found according to the dimensions of Burnout syndrome that mainly personal accomplishment was at low levels, while in our research it was found at high levels. Hidalgo et al. (2019), obtained high values in the dimensions of emotional exhaustion and depersonalization, noting a higher percentage of low level of personal accomplishment; unlike our study, which we obtained low values in emotional exhaustion and depersonalization and high value in personal accomplishment. According to Correa-Correa et al. (2010), they determined that, emotional exhaustion was manifested at a high level only in 18%, depersonalization 9% and personal fulfillment 4%, however, in our study low values were obtained in emotional exhaustion and depersonalization and high values in personal fulfillment. These results may be due to the social context in which the person develops, taking into account that at the international level there are different working conditions, which may influence the different values obtained. In relation to gender, the prevalence of Burnout Syndrome was equal for both genders (7.3%). Bedoya et al. (2017) reported a higher percentage of burnout in the male gender. Arias et al. (2019), found that with respect to gender males showed higher levels of emotional exhaustion and depersonalization. Also, Cotrina & Panez (2019), Flores (2018), Morgado et al. (2022), determined that with respect to gender the highest percentage was conforming by the male gender 2.52%, 54.5 % and 41.67% respectively. In contrast, Guarate et al. (2020), and de Anzules et al. (2022), found similar males for both sexes. It could be considered that these results could be due to the fact that teachers who presented SB were the same number in both males and females in most studies, and that they often have a heavy load in their daily activities regardless of sex. Regarding the age group, the age in which more cases of teachers with Burnout Syndrome were evidenced was in the group between 36 and 50 years old (9.7%). Flores (2016) determined that the most affected group was equal to or older than 45 years. Lugo (2019), on the other hand, found that the majority was between 23 and 32 years of age. Morgado et al. (2022) found that the SB was mainly between 36 and 50 years of age. Anzules et al. (2022) highlighted those under 50 years of age. Peres et al. (2021), determined that being younger than 40 years is a risk factor for developing SB. These results may be due to differences in the choice of age groups in each study; however, there seems to be a tendency for BS to increase as the age of study increases. Also, the marital status where Burnout Syndrome was most prevalent was among singles (7.3%). Morgado et al. (2022), obtained that singles presented 40% compared to the married group that only showed burnout levels of 21.43%. Peres et al. (2021) determined that being single is a risk factor
for developing BS. For Bedoya et al. (2017), the results are the opposite, because 60% of married people present SB. Similarly, Arias et al. (2019), with a score 28.54%, and Flores (2018), 68.2% married. Cotrina & Panez (2019), evidenced that married people presented 2.97% of Burnout Syndrome. The data obtained may be due to the fact that most workers are married, have many years of work and do not seem to be satisfied with the salary they receive.

The limitations were that the application of the instrument was carried out virtually, hoping that the questionnaire created in Drive could be sent to the teachers according to their availability and trusting that they would be interested in participating in the research. However, the participation of all teachers was not achieved because, due to the pandemic, several teachers were not in the city of Chachapoyas and simply did not answer the survey.

5. Conclusions

In teachers of the Faculty of Health Sciences, the prevalence of Burnout Syndrome was low. According to sex, this prevalence was equally manifested in both genders. With respect to age, there was a higher prevalence of this syndrome between 36 and 50 years of age, and according to marital status, single people had a higher prevalence.

6. Acknowledgements

We express our gratitude to the authorities of the Faculty of Health Sciences of the UNTRM, who allowed the realization and collection of data and to the teachers for their collaboration.

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