Prevailing factors causing professional burnout in teachers

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Abstract: Introduction: Burnout Syndrome (BS) consists in a reaction to excessive work-related stress. Objective: To check the prevalence and associated factors of BS in kindergarten, primary and secondary public school teachers. Method: A cross-sectional study was carried out; 462 teachers from the cities of Januária, Itacarambi, Manga, São Francisco and Pedras de Maria da Cruz were interviewed. The Preliminary Questionnaire for Burnout identification was the instrument used to classify individuals into “exhausted” and “not exhausted”. The associated factors were gender, type of education, time experience with teaching, employment in other public schools, employment bond, satisfaction with the income, weekly teaching hours, and presence of diseases. Results: Among the teachers surveyed, 24% were in stage 3, the point when BS begins; and 4.7% were in stage 4, the most critical stage of the syndrome. The BS was associated with low pay, dedication to the teaching career and time experience with teaching from one to 11 years or more. Conclusion: That the BS is highly prevalent among permanent and hired teachers of the public and free education network.

Keywords: Burnout Professional, Teachers, Stress Psychological.

Fatores que prevalecem ao esgotamento profissional em professores

Resumo: Introdução: A síndrome de esgotamento profissional (SEP) é uma reação ao estresse excessivo relacionado ao trabalho. Objetivo: Verificar a prevalência e os fatores associados à síndrome do esgotamento profissional (SEP) nos professores da rede pública dos Ensinos Infantil, Fundamental e Médio. Método: Para este estudo transversal, 462 professores das cidades de Januária, Itacarambi, Manga, São Francisco e Pedras de Maria da Cruz foram entrevistados. Utilizou-se como instrumento o Questionário Preliminar de Identificação do Burnout, que classifica o sujeito em “esgotado” e “não esgotado”. Os fatores associados investigados foram: sexo, modalidade de ensino, tempo na docência, se trabalha em outra escola pública, vínculo empregatício, se está satisfeito com a remuneração, jornada semanal na docência e se possui algum tipo de doença. Resultados: Dos professores investigados, 24% estavam na fase 3 – estágio em que começa a se instalar a SEP – e 4,7% dos professores estavam na fase 4 – estágio mais crítico da síndrome. A SEP esteve associada à baixa remuneração, à dedicação à carreira de docente e ao tempo de trabalho de um a 11 anos ou mais. Conclusão: Pode-se concluir que a SEP é altamente prevalente entre os professores efetivos e efetivados do ensino público e gratuito.

1 Introduction

Burnout syndrome (BS) is a psychosocial phenomenon arising as a response to chronic stressors at work, in professionals who deal with clients in an emotional, direct and constant way (GIL-MONTE, 2005; MASLACH, 2003; MASLACH; SCHAFERLI; LEITER, 2001). The BS is recognized worldwide as one of the great psychosocial problems affecting the quality of life of professionals from diverse areas, especially those involved in health care, education and human services, generating an important occupational and social issue (SOUSA; MENDONÇA, 2009).

In Brazil, BS has been recognized as a professional disease since 1999, by Decree-Law Nº 6.042/07, Social Security, included in List B of Group V, of the International Classification of Diseases (ICD-10).

The syndrome of professional exhaustion (SPE), or burnout syndrome (BS) (MASLACH; JACKSON, 1986), is a term highlighted in the teaching work in recent years. The teaching category has been the target of numerous psychosocial stressors present in the work context. According to Both (2011), the education professional develops one of the most important and stressful activities of society, in which time is required with the student’s training and commitment to the tasks of class preparation.

Besides teaching the classes, the teacher must do the administrative work, planning their activities, recycling, guiding the students and the care of the parents. He should also organize out-of-school activities, attend coordination meetings, seminars, class councils, complete individual reports on students’ learning difficulties and often also take care of heritage, material, playgrounds and dining places (NACARATO; VAR ANI; CARVALHO, 2000). Other stressors that teachers face today are the use of illicit drugs in the school environment, especially on the night shift, the lack of interest of the students, the constant use of cell phones in the classroom, as well as the misuse of social networks on the Internet, in class times, violence between students and verbal and physical violence of students with teachers. Motivational and behavioral problems of the students are pointed out as significant and/or psychological stressors in teachers (SILVEIRA et al., 2014).

Although stress and burnout in teaching have certainly occurred for a long time in teachers, their recognition as an important public health issue has been more explicit in recent years, due to the current educational scenario in which teachers are subjected to several factors negatively reflecting the profession (BATISTA et al., 2010). It is verified that the results found in investigations carried out by researchers in recent years attest to the severity of burnout in these teaching professionals, falling within this professional category, identified as high risk (FARBER, 1991; HEUS; DIEKSTRA, 1999; KOVÉSS-MASFÉTY et al., 2006).

The Brazilian educational scenario has a very problematic picture regarding the work of the teacher since the high-level tasks are transformed into routines, and there is less time to perform work, professional updating, leisure and social life, as well as opportunities for creative work (CARLOTTO, 2011). Changes in the role of teachers in society have negative implications, as they have been associated with early retirements, absenteeism, medical leave and worker turnover (SEGURA, 2014).

Considering that psychosocial disease prevention programs could be developed, the objective of this research was to verify the prevalence of BS in teachers of the public elementary and middle school system and to analyze the association between BS and associated factors (gender, education, time in the educational area, current employment status, satisfaction with pay, weekly work and illness) in some cities in Southeast Brazil.

2 Method

This research is characterized as a descriptive, quantitative and cross-sectional study, carried out with a representative sample of teachers belonging to the schools of the jurisdiction of the State Superintendency of Education (SEE) of Januária, Minas Gerais.

The study population consisted of 3,260 teachers from the state public area of the SEE. An unknown prevalence was used for the outcome (equal to 50%), a tolerable error of five percentage points, a 95% confidence level, a delineation effect of 1.5, adding 15% for possible losses and refusals were used for the sample size calculation. Thus, it was estimated that it would be necessary to collect information from 457 teachers. Due to the characteristics of the sampling process by a conglomerate, 462 teachers participated in the sample. Of them, 122 (26.4%) were males, and 340 (73.6%) were female. The subjects’ ages ranged from 20 to 66 years old (36.27 ± 8.52).

The teachers participated randomly in the survey. In the city of Januária, two students from the Physical Education course of scientific initiation visited the public schools and applied the questionnaires to all teachers who agreed to participate in the study and signed a free and informed consent form,
CAAE: 08226512.5.0000.5146, approved on October 23, 2012. Teachers from the cities of Itacarambi, Manga, São Francisco, and Pedras de Maria da Cruz participated in the conglomerate survey at an educational meeting held at the State University of Montes Claros, Campus Januária, held by the SEE.

The inclusion/exclusion criteria observed were: to be a teacher in the public school system, to be teaching in the classroom and not to hold a management position. For the data collection, the Preliminary Burnout Identification Questionnaire (SPE) and Maslach Burnout Inventory (MBI-ED) for educators, proposed by Maslach and Jackson (1986), translated and adapted to the Portuguese by Jbeili (2008) to be used in Brazil. This questionnaire is a Likert Scale, composed of 20 questions evaluating BS indexes, with five response options: 1 for “never,” 2 for “annually,” 3 for “monthly,” 4 for “weekly” and 5 for “daily.” Individuals respond to questions related to psychophysical characteristics related to work.

The questionnaires classify BS in four phases by adding the answers, ranging from 0 to 20 points: There is no beginning of BS; from 21 to 40 points: stage 1 of the BS with the possibility of developing the syndrome; from 41 to 60 points: stage 2 of BS where the individual is in the initial phase of the disease; from 61 to 80 points: stage 3 of the BS where the syndrome begins to settle in the individual, requiring the help of a professional to prevent future worsening of the disease; from 81 to 100 points: Phase 4 of the BS being a considerable phase of BS, and reversibility is possible through treatment performed as soon as possible.

The dependent variables were collected through a questionnaire and categorized as follows: teaching (Pre-School teacher, initial and final years of Elementary School, and High School), teaching time (less than 1 year, 1 to 5 years, 6 to 10 years and 11 years or more), work in another public school (yes and no), employment (effective, contracted and assigned), satisfaction with the remuneration (yes and no), weekly teaching time (20 hours, 40 hours, 60 hours or more than 60 hours), has some type of illness (yes and no).

The questionnaires were delivered to the teachers during class times and in training courses of the state public schools of the Jurisdiction of the State Superintendence of Education of the City of Januária (MG), in 2013, being returned directly to the researchers.

The procedures used for the statistical analysis were descriptive statistics features with frequency, mean and standard deviation. The Chi-square test ($x^2$) and Statistical Package for Social Science (SPSS), version 20.0, used to verify the association between BS and associated factors. The research project was approved by the Ethics Committee in Research of the State University of Montes Claros (Unimontes), through the Opinion Consustantiated n° 152,343, on November 23, 2012.

### 3 Results

Table 1 shows the classification of the sample according to the teaching modality. Of the 462 teachers investigated, there were 17 (3.7%) pre-school teachers attending students aged four and five; 90 (19.5%) teachers of Elementary School - initial years of the first to fifth grade; 251 (54.3%) teachers of Elementary School - sixth to ninth grade; and 104 (22.5%) teachers of the high school.

Table 2 shows the teachers’ classification in the BS score: 12% of the teachers were classified in phase 1, where BS can be developed; 59.3% were in phase 2, the initial phase of the disease. The data presented in the first two phases indicate that it is necessary to make interventions that can improve the working conditions of teachers, avoiding the worsening of BS; 24.2% were in phase 3 and 4.7% in phase 4. Those in these stages need treatment.

Table 3, the chi-square test was used to verify if there is an association between the BS variable and the associated factors. The results showed that there was a significant association between the following variables: employment relationship; satisfaction with remuneration; with some disease. Another variable that deserves attention is the weekly work shift, as it presented an approximate value of association with the BS variable. It was observed that the teacher’s position interferes with the perception of the work. Effective teachers presented higher prevalence in phase 4 and teachers contracted in phase 2. Teachers dissatisfied with the remuneration and some disease presented were in greater proportion, in phases 3 and 4.

<table>
<thead>
<tr>
<th>Teaching modalities</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school</td>
<td>17</td>
<td>3.7</td>
</tr>
<tr>
<td>Elementary school (IY)</td>
<td>90</td>
<td>19.5</td>
</tr>
<tr>
<td>Elementary school (FY)</td>
<td>251</td>
<td>54.3</td>
</tr>
<tr>
<td>High School</td>
<td>104</td>
<td>22.5</td>
</tr>
</tbody>
</table>
| **Total**             | 462| 100.0%

IY: initial years; FY: final years.
4 Discussion

This study verified the prevalence of BS in teachers of the public school system and associated factors. The main finding was that approximately 30% of the teachers presented BS (phases 3 and 4). Also, the low remuneration in the profession and the fact of being a teacher in the professional career are factors associated with higher BS prevalence.

The data obtained in this study indicated that 24% are in phase 3 and 4.7% in phase 4. These results are like those found in the study conducted in schools in the metropolitan region of Porto Alegre (RS)

Table 2. Distribution of teachers according to BS phases.

<table>
<thead>
<tr>
<th>SPE phases</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-School</td>
<td>57 (12.3%)</td>
<td>271 (58.6%)</td>
<td>112 (24.2%)</td>
<td>22 (4.7%)</td>
<td>462</td>
</tr>
<tr>
<td>IY Elementary School</td>
<td>01 (5.9%)</td>
<td>11 (64.7%)</td>
<td>04 (23.5%)</td>
<td>01 (5.9%)</td>
<td>17</td>
</tr>
<tr>
<td>FY Elementary School</td>
<td>19 (21.1%)</td>
<td>51 (56.6%)</td>
<td>16 (17.8%)</td>
<td>04 (4.4%)</td>
<td>90</td>
</tr>
<tr>
<td>High School</td>
<td>26 (10.3%)</td>
<td>152 (60.5%)</td>
<td>62 (24.7%)</td>
<td>04 (4.4%)</td>
<td>251</td>
</tr>
<tr>
<td>Total</td>
<td>11 (10.6%)</td>
<td>57 (54.8%)</td>
<td>30 (28.8%)</td>
<td>06 (5.7%)</td>
<td>104</td>
</tr>
</tbody>
</table>

Table 3. Chi-square test of BS variable with independent variables.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPE phases</td>
<td>Phase 1</td>
<td>Phase 2</td>
<td>Phase 3</td>
<td>Phase 4</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

FY: Initial years; FAF: Final years.
by Carlotto (2011), who verified 28.9% of teachers with BS principle.

More expressive results were found in a study by Batista et al. (2010) with teachers from João Pessoa (PB), in which 43.4% presented a risk phase in the classification of the syndrome. Another research, developed by Benevides-Pereira et al. (2008), analyzing BS in Paraná teachers, also showed higher results in the risk phase, with 43.3%.

Corroborating with these studies, a study carried out by Codo (1999), who investigated 52 thousand teachers from the public school system in the 24 states of the Brazilian Federation, concluded that 48% showed some symptom of burnout, which, according to the author, could lead to the bankruptcy of education.

Even though it is a profession in which most of the studies point to the prevalence of BS, the study carried out with teachers from public and private schools in Viçosa (MG) did not identify BS (FERREIRA; SANTOS; RIGOLON, 2014).

Low BS predisposition was found in a study carried out with professors from the University of Paraíba (PI), whose data revealed that 34.5% of them had a low level of exhaustion. On the other hand, 32.75% presented medium to high levels. Regarding the professional achievement, 35.4% indicated a low level; 32.7%, high; and 31.9%, medium level. For depersonalization, 38.9% had a low index; 31.9%, medium; and 29.2%, high index. Although the results presented in the exhaustion dimension indicate the existence of exhaustion, they did not reveal a high predisposition of BS (SILVA et al., 2014).

The teaching profession is exposed to several sources of tension, such as high workloads, high number of students per classroom, inadequate physical structure, few pedagogical works as a team, little involvement of the family in development monitoring Children’s schooling, low salaries, devaluation of the profession, excessive collection, inappropriate use of social networks on the Internet by students during class time, disrespect, disinterest, and threats to the teachers.

The lack of interest of the students in the public area, added to the low salaries, causes a feeling of teachers’ dissatisfaction, hindering their efforts to convert them into learning. However, in the private area, teachers tend to question the excess of charges, even under conditions in which their productivity is adequate (FERREIRA; SANTOS; RIGOLON, 2014).

Another factor impairing the teaching profession is the pedagogical policies and public policies that guide education, specifically in the state of Minas Gerais, which made the public servants without competition through Law 100/2007, leaving the teacher in the uncertainty of the position. Complementary Law nº 100/2007 (MINAS GERAIS, 2007) was instituted on November 5, 2007, and regularized the legal situation created by items IV and V of Article 7 of this law, welcoming teachers in the pension system for retirement effect and granted the vote and participation in all positions in the institution. The teachers did not become effective, but they became permanent since the effective function occurs only through a public contest (BRASIL, 1988).

The way teachers deal with this potentially adverse daily life can have negative repercussions, generating physical and psychological problems. Currently, BS is among the problems that most affect the teachers, which, in this study, presented high prevalence in teachers.

Ferreira, Santos and Rigolon (2014) point out that professional dissatisfaction and inadequate work conditions can trigger changes in the physical or psychological well-being of these professionals, leaving them more likely to develop burnout and lead them away from their work.

The results of this study are worrisome, since they indicated a high predisposition index to BS, deserving attention because the teachers are still active and there is no health policy to attend this population.

According to Maslach and Goldberg (1998), although many people may leave work because of burnout, others may continue to perform their duties, even though they work well below their work potential and present problems in the quality of their work. Still in this line of thought, these results need special attention, since the teachers identified and signed with the BS are in functional exercise, probably aggravating their situation with damages to the quality of their work and with consequences in the teaching-learning relationship of the students as they said (GIL-MONTE; CARLOTTO; CÂMARA, 2011).

The results of this study pointed out that 8.1% of the teachers who are in stage 4 of the BS were permanent and presented a higher risk of BS due to the insecurity of the position. There is a lack of studies that evaluate the dissatisfaction and the development of BS in this specific population, making a more comprehensive discussion impossible.

Another factor that presented a higher prevalence in BS was the low remuneration, which often leads teachers to hold two positions, working in different
shifts, and may have a high mental and physical strain. The issue of wages is a trigger for several problems, which is why, in public school teachers tend to do double or triple working hours to obtain a better remuneration, with little time to rest and dedicate to the family. It is common for these professionals have symptoms of stress, depression, and anxiety, characteristic of BS (FERREIRA; SANTOS; RIGOLON, 2014).

Volume and work overload have been the most predisposing variables to BS (CARLOTTO, 2011), that is, when the quantity and quality of work demands exceed personal capacity for performance, the individual will tend to become ill. In the study by Codo (1999), the findings indicated that first and second-grade teachers in public schools suffered high levels of stress due to lower wages and worse working conditions.

In this research, the limitations of the directors’ ability to conduct research in some schools and the resistance of some teachers to participate in the survey or to respond to the questionnaires are highlighted as limitations.

The results found in this study indicate that there is a high index of teachers from the schools of the Jurisdiction of the SEE of Januária (MG) with BS. Thus, it is necessary to propose interventions in schools to guide and encourage their leaders and teachers on the importance of planning pedagogical activities and facing burnout to involve teachers, school institutions, and managers. Also, the findings of this study may be important in guiding the public policy guidelines for health promotion of teachers.

5 Conclusion

The results presented in this study allowed the identification of a high BS prevalence, affecting one in three teachers of public and free state education. This index is worrisome since teachers continue in educational activity without intervention that can improve the picture, and lead to the bankruptcy of the teaching-learning process in the Jurisdiction of the SEE of Januária.

Being an effective or permanent teacher, with the dedication of 40 hours a week or more, was a requirement to prove BS in its most acute degree. Low wages lead teachers to work in two or three shifts, with several different classes, favoring the high predisposition to BS.

Interventions with emotional support are recommended for teachers to prevent and use strategies to cope with the consequences caused by BS.

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**Author’s Contributions**

Adelson: Coordination, Organization of the Study and writing of the text. Maria de Fátima: Conception of the text and organization of sources. Celina Aparecida: Data analysis. Izulina and Karoline: Text writing and field research. Diego Augusto and Edio Luiz: Data Analysis and Review. All authors approved the final version of the text.

**Notes**

1 License: 4B6MINO86Z4LZ V9A A7GHEC89P5TR NTOH A A 3X K X5Y W7GM2SW HCC TA F Y BL3B3IK PM M7DN3MSXB008VPK XZHSEXG5T8