

Burnout's Syndrome in Dentists

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Abstract

Aims: The aim of this study is evaluate the level of Burnout's Syndrome in dental surgeons; to verify correlation among sublevels of burnout and group of social and demographic variables.

Methods: This research has an exploratory, descriptive and cross-sectional character. People that consented participated of this research, answered a semi-structured questioner which has two parts. The first part consists of description of quantitative social and demographic variables. The second is the MASLACH BURNOUT INVENTORY (MBI), which is a tested instrument use in the entire world. To analyze collected data, it was performed descriptive statistical analysis and co-relation of social and demographic variables and sub-levels of MBI, using for this, Pearson's coefficient, at 5% significance level.

Results: Co-relation among sublevels of quantitative social and demographic variables was "poor" or "so poor". The majority of professionals showed high level in two categories: emotional exhaustion and depersonalization.

Conclusion: However, professionals showed high level on "professional satisfaction".

Keywords: Burnout Professional; Psychological Stress; Job Satisfaction

Introduction

Human work has a double character: is a source of realization, satisfaction, pleasure, structuring and conforming the process to identify the subjects; on the other hand, it can become a pathogenic element, being harmful to the health. On work environment, the process of body strain is determined in some parts by work type and organization form [1]. Codo et al. [2], said that the work organization make an specific action on people, which impact is psychiatric system. In some conditions, a suffering appears that can be attributed to the clash between individual histories, containing projects of hope and wishes, and a work organization that ignore it.

The difficulty to prove the cause among psychosocial factors and occupational diseases have been contribute for workers from diverse professional areas continue suffering and showing mental health affected. In many times, this risks are silent and waste much time to be recognized, because who is exposed, don't recognize around them these factors like being a risk for their health, or they recognize so later.

According to Faber [3], stress have positive and negative effects for life, burnout is always negative. The difference is stress can disappear after an ideal period to rest, but burnout doesn't reduce with vacations neither with other forms to rest. Codo and Menezes [4] think that burnout involve attitudes and negative behaviors in relation to users, organizations and works. So, is a subjective experience, involving attitudes and feelings that can cause problems about practice and emotional to workers and organizations. On the other hand, the mean of stress don't involve these attitudes and behaviors, but is an individual exhaustion with interference in worker's life and not necessarily in their relation with work.

Richardsen and Burke [5] found in Canadian doctors high levels of stress related with low levels of Professional exercise and with negative attitudes in relation to attendance and health of their patients.

Malasch and Jackson [6] discovered that works that needs contact with people continually and where often there is an affective force between the helper and who is helped easily, are professions that can develop more easily the burnout. Professionals more susceptible are: nurses, social assistants, doctors, psychologists, psychiatrists, policies, teachers, occupational therapists, dentists and others.

Cooper et al [7]; Murtomaa et al.[8]; Osborne and Croucher [9] through their studies show evidences that suggests that dental surgeons suffer with a high level of work stress. This stress cause profound psychological effects on dentists, where commons symptoms at burnout and depression can exist.

According to Gil-Monte and Peiró [10], the interesting to study burnout syndrome is due: the importance that organizations are attributing to life quality of workers, because this syndrome has important repercussions on results from organization (absenteeism, staff turnover, professional performance, lost of quality, etc); to peak of growing of work organizations, in public and private sector, whereas quality of attention at user is a critical variable for success of organization.

The aim of this study was evaluate the level of burnout syndrome in dentists, to verify co-relation between sublevels of burnout and group

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of social and demographic variables and to compare results found with other national and international studies.

Materials and Methods

All professionals that consent to make part of research received the Free and Clear Consent Term, which explained to participants about voluntary participation, maintenance of identity secret. It was respected Governmental Act number 196, October 10th, 1996, from Brazilian Health Council and its complementary resolutions [11]. This research was send to Ethic Committee in Research with Humans – Araçatuba Dental School / São Paulo State University – UNESP (Process number 2007-01649).

This study has an exploratory, descriptive and cross-sectional character. All dental surgeons participant of post-graduation courses (strictu and lato sensu) in Araçatuba city – São Paulo State / Brazil, like UNESP, São Paulo State Dental Surgeon Association (APCD) and Dentistry Brazilian Association (ABO), were invited to make part of this research.

The participants received and envelope with Free and Clear Consent Term and questioners. It were hand over in begin of theoretical classes of courses and got in the end. Finally, just 92 professionals participated of study.

The used questioner like research instrument is constituted by two parts: the first part show questions about social and demographic data aiming to get information about dental surgeon profile (gender, age, civil state, number of children, year of conclusion of graduation, Professional situation, average of worked hours/Day, average of patients that Professional take attendance daily, average of quantity of days that during vacation/year, number of dental surgeon that work in the same local, education level and dentistry specialist area). The same method was performed in previous test study, where it wasn't necessary any change in instrument.

In the second part of investigation consisted of MASLACH BURNOUT INVENTORY (MBI). This instrument was developed and test by Malach and Jackson6 and it has three sublevels: 1. Emotional Exhaustion – EE (9 questions), make value to be exhausted emotionally by work demand; 2. Depersonalization – DP (5 items), make value the level which each one recognize cold and far attitudes; 3. Personal satisfaction – RP (8 items), evaluate the self-efficiency feeling and personal satisfaction in work (Table 1). The same was translated and adopted to Portuguese version by Robayo-Tomayo[12], consisted by 22 items in affirmation form which refers to attitudes, emotions and feelings that professional show front his/her work or front his patients.

The participants used a scale type likert in Portuguese version which shows five values with variation from 1 (one) to 5 (five) scores to indicate frequency of experience of feeling described in each report. The score 1 should be used for never, 2 – sometimes/year, 3 - sometimes/month, 4 – to indicate sometimes/week and 5 – daily. So, the elements that are emotionally exhausted or show high global level of burnout will have high score about emotional exhaustion and depersonalization and low score about personal satisfaction.

Brake et al. [13] confirmed that MBI can be considered an ideal instrument to use among dentists.

To analyze the answers, it was made a data bank to insert quantitative values and through it, was performed descriptive analysis lately, with survey of frequencies and percentages.

Statistical analysis was performed by co-relation among social and demographic variables (which consist on age, number of children, year of conclusion of graduation, average of worked hours/Day, average of patients that Professional take attendance daily, number of worked days/week, average of quantity of days that during vacation/year) and sub-scales of MBI, using Pearson's Coefficient (r), with 5% significance level.

It was calculated the averages (m) of each sub-scale of MBI and its standard deviation (s²) to verify global level of Burnout's Syndrome in interviewed dentists.

Results

Among 115 professional from post-graduation courses of Araçatuba city – São Paulo State – Brazil, just 92 answered questioners. Among them, 63% were males (Figure 1).

About work day of dentists, there was variation between 4 and 15 hours, with the average 8.7 hours/day. Dentists took attendance for the average of 15 patients during each work day; they worked 5 days/week (average). The period of vacation varied from 0 to 60 days/year, and the average was 14 days/year. Few of them worked alone in their dental offices; generally they divided their work local with 2 professionals at least.

Table 1 show the co-relation of quantitative variables and sub-scales of burnout through Pearson's Coefficient (r). The sub-scales of burnout levels show a co-relation "so poor" or "poor" in relation to quantitative variables.

Table 2 show medium scores and standard deviation of burnout's sub-scales.

Discussion

Original use of burnout term is credited at Freudenderger

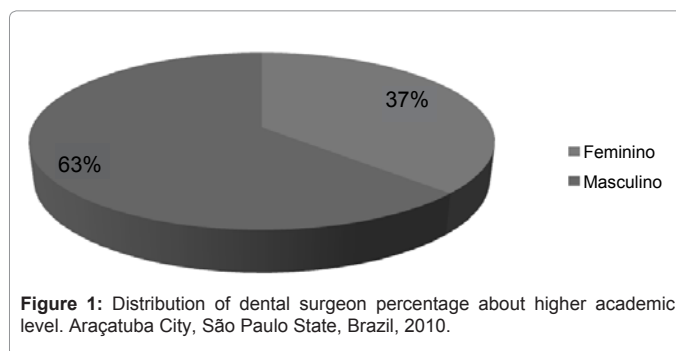


Figure 1: Distribution of dental surgeon percentage about higher academic level. Araçatuba City, São Paulo State, Brazil, 2010.

Variables	Burnout's sub-scales		
	Depersonalization (DP)	Personal satisfaction (RP)	Emotional Exhaustion (EE)
Age	0.07	-0.07	-0.25
Number of children	0.15	-0.21	0.04
Time after conclusion graduation course	0.04	-0.04	-0.25
Worked hours/Day	0.03	0.05	0.05
Patients/Day	-0.07	0.13	0.10
Worked days/ week	0.03	0.02	0.14
Vacation	-0.01	0.06	-0.10
Number of dentists	-0.07	0.05	0.13

Table 1: Pearson's Coefficient in 5% significance level.

	EE	RP	DP
Average	24.78	24.76	9.18
Standard Deviation	±5.92	±11.80	±10.86

Table 2: Medium scores and standard deviation for MBI's sub-scales in dentists sample.

[14], north-American psychoanalyst that begin to observe many manifestations of exhaustion on psychotherapists from a clinic and their patients. When translated for Portuguese, burnout term mean some like "to lost the fire", "to lost the energy", or "to burn (out) completely" [2].

Burnout's Syndrome was included in 10th Review of International Disease Classification [15], into the group of "problems related to organization and form of life" (code Z73).

The most accepted concept, although there isn't consensus among authors, is the purpose of Malasch and Jakson⁶ that consider burnout like "an answer at chronic work stress caused by direct and excessive contact with humans, particularly when they are worried or with problems".

The majority of participants were man and this result differs of literature because dentistry is considered today like a profession with female profile [16,17]. Saliba [18], in her work observed a large number of female university students in two universities.

Cooper et al [7], Bontempo[19] and Mathias et al. [20] observed in their studies a relation between gender of Professional and burnout's syndrome, because day that link professional practice and familiar activities. But Murtomaa et al. [8] valuating a sample of Finland dental surgeon, didn't found this association. In another research, with policies, they found negative associations between familiar emotional support and emotional exhaustion, characteristic of burnout, although they didn't found any difference related to gender [21].

In the present study, the sub-scales of burnout levels had frail co-relation with quantitative variables. Oliveira and Slavulsky [22] performed studies with dentists from Porto Alegre City – Rio Grande do Sul State – Brazil and also found poor co-relations between quantitative variables and the burnout sub-scales, different of majority of other international works about burnout's syndrome.

Table 2 show medium scores and standard deviation of burnout's sub-scales. Oliveira and Slavulsky [22] found lower averages of medium scores about emotional exhaustion and depersonalization and higher averages of personal satisfaction.

Considering that situations of works are stressing, the better is that dentists would find the better way to deal with it because is practically impossible to escape.

In his study with 709 Germany dentists related the absence of career perspective like strong tension factor related to burnout. In comparison with Netherland dentists, the found of burnout was more favorable because they showed lower emotional exhaustion, as depersonalization sub-scale and a higher value on personal satisfaction sub-scale [23].

In Brazil the studies that discuss stress in dentistry are rare; occupational stress have been studied more often principally in companies because it are responsible by production reduction, work leave, among others losses [24].

Acoording to Wasoski [25] and Rada and Johnson-Leong [26] dentistry is a profession that is in risk of many stress factors and can

conduce to Burnout's syndrome. The dentist should be in attention to these factors and should try administering them to avoid dissatisfying. Economic factors including costs during graduation and the Begin of activity show themselves like elements that can cause burnout.

So, reduction of debts and income goals should be established and they should be evaluated again periodically to maintain the costs to enter and administer business in perspective. Other problem is that dental surgeon work in isolated work environment and to alleviate this situation, should have vacation periods and practice relax exercises, which can reduce this kind of tension.

Roger and Abalo [27] observed that professionals with higher age are less vulnerable at burnout, maybe due they have developed better forms of deal with stress and created more real professional expectative. Similar result is cited by Osborne and Croucher [9] that discovered that reduction of burnout levels in dentists in the end of career can be due many factors: crescent abilities to become sociable with age, reduction of work routine that allows larger personal contact, or establishing of personal relations with patients conforming over the years.

Oliver et al. [28] observed association between the Syndrome and people that didn't had stable relation. Osborne and Croucher (found higher burnout levels in single dentists than compared with married dentists, suggesting that involvement with spouse or familiar element can become married people more experienced to deal with personal problems or conflicts.

About global burnout levels, whereas its high index correspond to high scores for Emotional Exhaustion (EE) and Depersonalization (DP) and low for Professional Satisfaction (RP), was observed by Osborne and Croucher that 10.6% of 340 British dentists showed this high global burnout level, while Oliveira and Slavutzky [22], in their sample composed by 169 Brazilian dentists, observed the same situation in only 1.0%.

A plausible explanation for these scores differences is that 75% to 100% of Brazilian sample have their jobs in private dental offices, while British dentists just 20% of them dedicated a larger time to private dental office. In this same study the authors emphasizes that an important characteristic of private dental office is the high control level that dentists have on their work conditions and explained that this factor is related to help reduction of stress levels.

But Baran [29] in their research with Illinois dentists, observed that 7.4% of them had got significant burnout levels and 83% considered dentistry like "so stressing". Romero et al. [30] performed a study with 156 dentists where 48.72% showed medium levels on burnout scale.

Conclusion

It shouldn't disregard the importance of individual factors and work environment on professionals' perception and reactions front stressing situations. It's necessary to change work conditions to reduce the strain of professionals. Although dentists show high levels of "Emotional Exhaustion" and "depersonalization", the personal satisfaction wasn't affected. The dentists that made part of this research didn't show high global burnout levels.

There isn't co-relation between burnout sub-scales and the evaluated social and demographic characteristics. It's necessary to make more studies to analyze others possible factors that have influence on cause and complication of Burnout's Syndrome. Some recommendations are suggested by Romero³⁰, like these: each professional should try to recognize the signals of emotional strain; to establish goals and

alternative solutions that allows control tension situations; to recognize the priorities in work; to acquire ordered habits; to prepare a list of activities; to assume the wrongs because is necessary to correct them.

Key Points

- Burnout has a high prevalence in this sample of dentist.
- Burnout there may be a negative impact on the quality of patient care.
- Despite a high rate of burnout, professionals have a good index of job satisfaction

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