

Prevenirea sindromului *burnout* în organizațiile românești – un studiu pilot în rândul personalului medical –

Title: Preventing “job burnout”¹ in Romanian organizations – a pilot survey among healthcare professionals

Abstract: The aim of this research was to realize a pilot study of a widely used burnout instrument (MBI-HSS) among Romanian medical staff. More precisely, this paper investigates the relationship between the perceived burnout frequency sociodemographic and professional characteristics at doctors and nurses, from different Romanian state hospital departments. The participants (N=74) completed the 22-item scale of Maslach Burnout Inventory-Human Services Survey (MBI-HSS), designed to assess three extents: emotional exhaustion (feeling drained by client contact), depersonalization (feeling negative about or alienated from clients), and sense of reduced personal accomplishment (lack of work-related fulfillment or esteem). The analysis shows that there is an interaction between the measured subscales and work predictors, especially in the case of emotional exhaustion, considered to be the burnout epicenter. In our sample, the main findings focus on the key concept of burnout, the emotional exhaustion, which is anticipated mainly by the total number of hours per week, by the age of the respondents and by number of patients. Also, we noticed a reverse reciprocity between emotional exhaustion and depersonalization, fact that let us believe that burnout is more a matter of task to be achieved than of relationship between medical staff and patients. The present study proposes a comprehensive approach and insists on the utility of the present instrument, despite the need of a deeper multidimensional analysis, in order to help specialists to evaluate the quality of Romanian organizations that involve human services.

Keywords: Burnout syndrome, emotional exhaustion, depersonalization, personal accomplishment, Romanian medical personnel.

Introduction

Health staff's burnout represents an issue that has enjoyed substantial research attention, over the last decades. Nowadays, it is unanimously accepted that professional burnout is a syndrome that affects workers in all occupations, being mainly widespread among human service personnel (Farber 1983; Thornton 1992; Leiter and Harvie, 1996; Reid et al., 1999; Edwards et al., 2000; Pranger and Brown 1992; Embriaco *et al.*, 2007; Taşkaya-Yılmaz, N. *et al.*, 2004).

Besides this, burnout is not synonym for occupational stress. These two phenomena differ in that, burnout is previously work-particular and requires intense involvement, whereas the occupational stress is an “imbalance” between work-related demands and existing coping resources (Maslach *et al.*, 1996). Burnout was also named in field literature as the outcome of a chronic occupational stress (Cushway et al. 1996; Lazarus and Folkman 1984; Miller, 1995; Schaufeli & Enzmann, 1998).

In addition, burnout differs from anxiety and depression, in that it originates from an accumulation of work-related stressors, that can be overcome, for example, after days off or vacation.

The pioneer in burnout field, Christina Maslach defines burnout as “a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment” that happens to people “who work with other people”.

These burnout determinants conceived in the “classical” theory of Maslach have been argued to be either three correlated dimensions of one factor (Lee, Ashforth,

¹ „Job Burnout” is defined as *a state of mental or physical exhaustion caused by excessive and prolonged stress.*

1993; Maslach, Jackson, 1985) and three separate factors that progress differentially over time to create unstable degrees of burnout (Golembiewski, Munzenrider, 1988), or three separate factors, where the emotional exhaustion reflects the essence of burnout (Koeske, 1993; Reilly, 1994). Indeed, a two-factor model consisting of emotional exhaustion/depersonalization and personal accomplishment has been supported (Brookings, Bolton, Brown and McEvoy, 1985; Dignam, Barrera and West, 1986). Still, some researchers consider that it is not yet clear whether feelings of diminished personal accomplishment are actually a component of burnout or should be viewed as an outcome of burnout. More precisely, emotional exhaustion, the key feature of this syndrome, after Gaines & Jermier, 1983 and Maslach, 1982, refers to feelings of being emotionally overextended and depleted of one's emotional resources. Depersonalization involves a negative or/and indifferent attitude to others. Finally, reduced personal accomplishment makes reference to a refuse of feelings of competence and doing well in one's work.

In a nutshell, the vast research literature on burnout can be summarized at five common basic elements, after Maslach and Schaufeli (1993). First, there is a prevalence of fatigue symptoms such as mental or emotional exhaustion, tiredness, and depression. Second, there are various atypical physical symptoms of distress. Third, these symptoms are entirely work related. Fourth, the symptoms manifest themselves in 'normal' persons who did not suffer from psychopathology before. And finally, decreased effectiveness and impaired work performance happens, due to the negative attitudes and behaviors.

Concerning the inventory that measure burnout, the Maslach Burnout Inventory for Human Services Survey (MBI-HSS), (1986) is currently considered the most widespread instrument cited in the specialized literature. Even if there are other questionnaires designed to measure burnout in human service professionals, such as Pines & Aronson' Burnout Measure, (1988), Leiter's model of burnout (1989, 1991), or Staff Burnout Scale for Health Professionals, designed by Jones J.W. (1980), the aforementioned questionnaires measure burnout as a one-dimensional model, whereas, the MBI-HSS has been shown not only to be the most valid and reliable multidimensional instrument for assessing burnout at human services providers (Schaufeli & van Dierendonck, 1993), but it has been strongly confirmed in other studies (Lee & Ashforth, 1990; Green *et al.*, 1991; Evans & Fischer, 1993; Schaufeli & van Dierendonck, 1993; Richardsen & Martinussen, 2004), and proved to remain invariant across different occupational groups (Green *et al.*, 1991; Leiter & Schaufeli, 1996; Schutte *et al.*, 2000; Bakker *et al.*, 2002; Richardsen & Martinussen, 2004), as well as in different national samples (Green *et al.*, 1991; Schaufeli & van Dierendonck, 1993; Schutte *et al.*, 2000; Hwang *et al.*, 2003, Anagnostopoulos F, Papadatou D., 1992).

As far as medical and nursing staff is concerned, Schaufeli (1999) draw up a "list" with several parameters that are linked with burnout. Among this, he introduced the following: biographic characteristics (young age, little work experience), personality, work-related attitudes (such as poor organizational commitment), general job stressors (such as high workload, lack of social support, role conflict and ambiguity), specific job stressors (e.g. much direct patient contact), individual health (e.g. depression and psychosomatic complaints) and organizational behavior (such as absenteeism and impaired performance). Still, findings of low degrees of burnout were found in the research literature concerning medical field. The present Maslach's

instrument subscales are used in the following studies about medical practitioners in England and Wales (Carson, Fagin, Brown, Leary, & Bartlett, 1997; Carson, Wood, White, & Thomas, 1997; Carson *et al.*, 1999; Coffey & Coleman, 2001; Hannigan, Edwards, Coyle, Fothergill, & Burnard, 2000; Malassiotis & Haberman, 1996; Prosser *et al.*, 1996; Whittington, 2002), North America (Lee & Henderson, 1996), Canada (Hall, Thorpe, Barsky, & Boudreau, 1999), Israel (Malach-Pines, 1999a, 1999b, 2002, 2004), Australia (Allen & Mellor, 2002), New Zealand (Hall *et al.*, 1999; Hall, 2001), and Europe (Buunk, Ybema, Gibbons, & Ipenburg, 2001a; Demerouti, Bakker, Nachreiner, & Schaufeli, 2000, 2001, Αναγνωστοπούλος Φ, Παπαδάτου Δ. (1992).

Despite of the aforesaid, to our knowing, burnout research in our country is at an incipient stage, as very little was written about the extend to which the three dimensional model of burnout affects the Romanian human service professional (see several burnout medical approaches in Popa-Velea, O., *et al.* 2008, Görög, I., Cîntea, S., 2008, Curis, C., 2008).

Objectives of the Study. Therefore, the main goal of this study was to investigate the applicability of the MBI-HSS among Romanian medical staff at a pilot study level, in order to draw out further substantiation for the three-factor structure. A second purpose was to set up the degree of burnout frequency experienced by medical personnel working in public or/and private hospital, more precisely in Neurosurgery, Pediatrics, Dental Medicine, Surgery, Oncology Departments, Internal Medicine, Sports Medicine Research Laboratory, and Blood Analysis Laboratory. A third aim is related to possible connections between internal and external job related factors that determine burnout development among selected target groups.

Methods

Participants. The setting for this research is a public hospital located in a large-sized city of Romania.

Data were collected during a period of 3 months from a total of 74 individuals (N=74) from which 16 doctors, 39 nurses, 7 laboratory nurses, 5 hospital attendants and 7 administrative staff, with relevant experience in public Romanian hospital. The 27% of our sample are working in Neurosurgery, the 8.1% in Pediatrics, 6.8% in Dental Medicine, 16.2% in Surgery, 13.5% in Oncology, 2.7% in Internal Medicine Units, 8.1% in Sports Medicine Laboratory and 14.9% Blood Analysis Laboratory, and 2.7 % in other medical units.

The mean age was 37.54 years (SD = 9.88 years) ranging from 20 to up to 65 years.

In our sample the mean ages of respondents were 37.56 years for the doctors, 38.46 years for the nurses, 35.14 years for the laboratory nurses, and 33.57 years for administrative employers.

The majority of nurses were female (n=33), with mean age 38.46 years.

In our sample there is a numeric equality between female and male doctors. Most doctors were married, nine of which without children, and 43.8% had a work experience of less then ten years, whereas 6.3% more that 30 years.

Concerning the educational level of doctors, 10 of them got a University degree, whereas the majority of nurses (n=33) were college or High School Nursing graduates. Masters degree or Ph.D. had only 6 of the doctors.

Concerning work tenure, 43.8 % of medical practitioner from our sample had a work experience of 1-10 years, 37.5 % between 11-20 years, 12.5 % was in the category of 21-30 years, and a percentage of 6.3% are working for more that 31 years.

Concerning nursing work experience, 38.5 % had a work experience of 1-10 years, 28.2 % of 11-20 years, 17.9 % was in the category of 21-30 years, and 15.4% had up to 31 years in the medical work field, as a nurse practitioner.

The mean period spent in the current positions by our respondents was 11.63 years. The mean period spent in the current positions by the doctors was 8.06 years, whereas for nurses 13.76 years.

Concerning laboratory nurses investigated in our sample, they measured 10.86 years experience in the current medical department.

Concerning the mean time nursing personnel spends during its working hours a week, caring for the patients, nurses generally dedicate about 43.15 hours a week, laboratory nurses 37.86 hours, whereas the majority of Romanian doctors from our sample work about 45.50 hours a week.

The weekly patient load for 44.6% of our respondents was between 20 and 50 patients a week. The majority of doctors (56.3%) have to look over 20 to 50 patients a week, whereas 57.1% of laboratory nurses have to check up about 100-125 patients a week. From the total our participants, 31.1 % of the respondents had enjoyed a work experience abroad.

Instruments and Procedure. The Maslach Burnout Inventory for Human Service Survey (MBI-HSS), conceived by Maslach and Jackson (1986) was used to evaluate burnout frequencies. The abovementioned version consisted of from 22 items. The emotional exhaustion scale contained nine items that tested the fatigue and the emotional depletion (e.g. "I feel like I'm at the end of my rope", "I feel fatigued when I get up in the morning and have to face another day on the job") and was originally reported an alpha coefficient of 0.90. The depersonalization scale was composed of five items that measure negative reactions and distant feelings towards patients (e.g., "I've become more callous toward patients since I took this job", "I feel I treat some recipients as if they were impersonal objects") and was given by the authors an alpha coefficient of 0.79. Finally, the personal accomplishment scale consisted of eight items that establishes the degree to which an individual feels that his work-related goals are being met (e.g.: "I have accomplished many worthwhile things in this job.", "I feel I am positively influencing other people's lives through my work "). For this factor was indicated an alpha coefficient of 0.71.

Participants responded to each item by indicating how often they experienced each of the 22 items on a 7-point Likert scale ranging from 0="never" experienced such a feeling, to 6 =experienced such feelings "every day". Responses on each scale were summed at the end.

The three levels of burnout frequency were low, moderate and high. Higher scores on emotional exhaustion and depersonalization and lower scores on personal accomplishment reflect higher levels of burnout. To assess levels of burnout, we used the normative scores provided by Maslach and Jackson (1986) which are as following: equal or up to 27 on emotional exhaustion; equal or higher than 13 on depersonalization; and 31 and lower on personal accomplishment.

The present version of the MBI-HSS was created based on a translation procedure from English into Romanian. The items of the instrument were formulated with the same content and precision as the items in the original instrument, taking

into consideration the cultural aspects of the Romanian healthcare system. Similarly to a research on British nursing staff among draw up by Firth *et al.*, 1985 and among a Dutch sample, (analyzed in Schaufeli & van Dierendonck, 1993), the term “patients” was substituted for “recipients”, as it was used in the original version of the MBI HSS. Apart from MBI-HSS instrument, participants were asked to provide identification details concerning their age, sex, profession, work department, work contract type, weekly patient load, present organizational tenure, total work experience, experience in public/private organizations, educational level, marital status, number of children, and quality of marital relationships.

Respondents completed a questionnaire during normal work hours.

The participants filled in the form about 10 minutes. Participation in the study was voluntary, and confidentiality was assured.

The medical staff investigated was not able to complete the questionnaires on the same day because of work pressure.

The agreement to complete the questionnaire was considered as consent to the participation in the study.

Results

The present study confirms that the prevalent characteristic of burnout is the emotional exhaustion dimension, as it was measured by the MBI-HSS, among the Romanian healthcare workers.

Means, standard deviations, as well as correlations among the indicators of the different variables are subsequently presented.

Profession		Emotional Exhaustion	Depersonalization	Reduced personal Accomplishment
Nurses	Mean	22,77	4,69	38,97
	N	39	39	39
	Std. Deviation	10,012	3,707	6,761
Hospital Attendants	Mean	26,60	4,40	36,20
	N	5	5	5
	Std. Deviation	11,327	5,413	11,411
Doctors	Mean	22,94	7,38	36,69
	N	16	16	16
	Std. Deviation	10,642	6,260	9,803
Laboratory Nurses	Mean	20,43	5,00	38,29
	N	7	7	7
	Std. Deviation	12,765	4,472	6,993
Others	Mean	17,00	7,14	34,43
	N	7	7	7
	Std. Deviation	8,926	3,132	6,161
Total	Mean	22,30	5,51	37,80
	N	74	74	74
	Std. Deviation	10,340	4,555	7,753

Table 1.1. Means and Standard Deviations of Burnout subscales

The MBI mean scores for the sample as a whole were 22.30 (SD=10.340) for emotional exhaustion, 5.51 (SD=4.555) for depersonalization, and 37.80 (SD=7.753) for personal accomplishment.

Analysis of the mean score on the emotional exhaustion subscale was 22.77 (SD = 10.012) for nurses, 22.94 for doctors (SD = 10.642), and 20.43 for laboratory staff (SD = 12.765), fact that indicates a middle burnout category as far as emotional exhaustion determinant is concerned.

Mean score on the depersonalization subscale was 4.69 (SD =3.707) for nurses, 7.38 (SD=6. 260) for doctors, and 5.00 (SD= 4.472) for laboratory nurses, fact that indicates us that doctors proved to be more alienated from clients than nurses. For a detailed presentation see table 1.1.

Moreover, in terms of frequency and always using the Maslach and Jackson (1986) operationalization of burnout, this sample of healthcare practitioners, exhibited moderate to high emotional exhaustion (see table 1.2.).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low (less than 17)	22	29,7	29,7	29,7
	Moderate (17-26)	27	36,5	36,5	66,2
	High (up to 26)	25	33,8	33,8	100,0
	Total	74	100,0	100,0	

Table 1.2. Emotional exhaustion subscale scores

When assessing burnout case morbidity using frequency scores on the MBI, there were higher levels of burnout on the emotional exhaustion (33.8%; n=25), but not on personal accomplishment. This fact can be translated either, in terms of a strong sense of existential significance, of incapacity to cure patients' diseases and thus not to think about own accomplishment, or as a positive psychological perspective, from medical practitioner side.

Another important finding revealed through a regression analysis focus on the emotional exhaustion, which is anticipated mainly by the total number of hours per week $t= 3.057$, ($p<.003$), by the age of the respondents $t= 3.005$ ($p<.004$) and slightly by number of patients $t= 1.465$ ($p<.167$). Thus, a higher level o burnout would be caused by quantitative internal work related factors and not by external ones.

Moreover, the correlation between depersonalization and personal accomplishment, $r=-.385$ ($p<.01$), let us understand the expected reverse reciprocity between these two dimensions.

Furthermore, there is a positive correlation between emotional exhaustion and the number of hours per week worked ($r=.265$; $p<.022$), that can be translated in terms of quantity time medical personal has to cope with.

Also, people with a longer tenure of work have high emotional exhaustion ($r=.274$; $p<.018$), fact that implies that they do not have developed sufficient ways of dealing with problems, as it seems that burnout is directly proportionate to the age, as far as our sample is concerned.

In our study, females were not found to have higher work related strain and burnout than males. Nevertheless, minor differences can be distinguished in the case

of personal accomplishment $t=-1,922$ ($p<.059$). Hospital life, with regard to exhaustion and its related causes can be thought to affect both sexes in similar ways.

Conclusions, limitations and implications for further research

The outcome of this pilot study has several conceptual implications. Current theory and research tends to highlight the differences among the three burnout dimensions, up to the point where it seems more suitable to consider burnout as three separate concepts, rather than as a unitary phenomenon that becomes manifest in the field (as mentioned before by Golembiewski *et al.*, 1986; Lee, and Ashforth, 1996; Leiter, 1993; Maslach, 1993).

In terms of burnout, overall, this sample of healthcare practitioners was moderate to high as far as emotional exhaustion is concerned.

Elevated levels of emotional exhaustion are considered to be central to the burnout syndrome, leading directly to a slight elevation in depersonalization, possibly as a coping mechanism intended to conserve emotional resources, or as a matter of routine. A correlation test was used to compare inventory scores to age, daily working hours, and tenure of work.

Perceived working conditions and workload were more important than external work determinants (marital relationship, children) in explaining the variance in burnout. We sustained this affirmation also by a qualitative research, where medical staff responses revealed the lack of medical equipment and medicines Romanian hospital workers have to cope with.

There are a number of limitations to this study, which need to be considered when reviewing the findings. First of all, it is clear that emotional exhaustion is a major contributor to burnout among Romanian healthcare workers. Nevertheless, it is a matter of concern that this study failed to identify any observable workplace factors associated with emotional exhaustion.

Burnout is a composite phenomenon that is usually conceptualized as developing over time rather than as a response to specific stimulus or working circumstances. There is the need for a deeper qualitative research in order to identify characteristics of mental health work that contribute to emotional exhaustion.

Secondly, the responses were taken from the same hospital setting. Although this strengthens the comparative aspect of the design by ruling out organizational goals, structure, and other potential confounds, fact that restricts the generalizability of the results among all Romanian healthcare settings.

Thirdly, data from the sample were gathered in the same period, which limits the ability to test causal assumptions regarding the burnout syndrome.

Even if, this is the first time burnout has been measured in medical population in Romania with the present instrument, it must be noted that the relatively small sample size is a restrictive factor with regard to generalize the results.

Burnout syndrome may be considered an indicator of the health of the caregiver settings. Moreover, several determinants of severe burnout are related not only to the organizational system they are complaining about (in a previous qualitative study, unpublished), but to their age, duration of working hours per week, and number of patients they have cope with.

Further studies are needed to target those risk factors for burnout that were identified in other studies, and to evaluate potential preventive strategies, and consequently implement training programs. Over the next decade, we hope Burnout syndrome would be acknowledged as an important outcome measure in clinical research.

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