

Public health and burnout: a survey on lifestyle changes among workers in the healthcare sector

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Summary. Burnout Syndrome is a condition which could most commonly be associated with negative effects on the quality of work and life. Some occupations are more likely to suffer from this syndrome, for example workers in the health sector. This survey was therefore conducted among hospital workers of the Marche Region in order to analyze levels of Burnout and any possible correlation of these levels with lifestyle changes. **METHODS:** The survey was carried out using a self-administered, anonymous questionnaire in two sections: the first consisted of the Maslach Burnout Inventory (MBI) and the second contained questions about the healthcare operator's lifestyle. The MBI investigates levels of Emotional Exhaustion (EE), Depersonalization (DP) and finally of Personal Accomplishment (RP) in respondents. Survey results were processed using descriptive statistics, applying the Chi-square statistic and an Odds Ratio ($p < 0.05$). **Results:** 53.4% of the questionnaire was duly completed. The scale with the highest incidence among interviewees was Depersonalization. Even though the high-level percentage for the DP and EE scale was equal to 22.3%, when adding the high-level percentage to the medium level percentage, the difference between low and medium-high level was found to be around 20% for all areas. Analyzing the correlation between lifestyle choices, and in particular the consumption of alcohol and smoking with Burnout Syndrome, a statistically significant Odds Ratio was observed in the DP scale vs alcohol (OR=4.67), the RP scale vs cigarette smoke (OR=2.50), and finally in the EE area vs cigarette smoke (OR=2.92). **Conclusion:** Our results are in line with other studies which show increasing levels of EE and DP in healthcare workers. Healthcare workers who have been in the same job for a considerable amount of time (15+ years) show the highest levels of EE and DP. Subjects with high levels of Depersonalization show a worrying exposure to alcohol abuse, while those with high levels of Emotional Exhaustion tend to make use of both alcohol and tobacco, demonstrating negative lifestyle choices; in spite of this, results for personal accomplishment being relatively low and therefore not cause for worry, subjects still show high levels of exposure to cigarette smoke. (www.actabiomedica.it)

Key words: burnout, public health, lifestyle, workers

Introduction

Over the past 20 years, professional quality of life has changed for many occupational groups. If, on one hand, work conditions have improved in some aspects, these changes have also caused new conditions to emerge, such as psychological disturbances linked to occupational stressors (stress, mobbing and burnout) (1).

In particular, some occupations linked to the public health sector seem to be more exposed to this type of problem, since prolonged psychophysical exhaustion, Emotional Exhaustion and a lack of personal fulfilment can have a negative influence on the quality of work and mental health of the healthcare professional (2-9).

Burnout Syndrome, in particular, has been recognized as the condition most commonly associated

with negative personal behavior in people who work in healthcare and education. The individual suffering from burnout can no longer appreciate the specific meaning attached to a role or the purpose of a job and lose interest in the people who are being taken care of (10, 11). It is difficult to respond to this syndrome in an appropriate manner, particularly when it comes to healthcare professionals (2, 12). The number of healthcare professionals showing signs of depression, passivity, loss of confidence in their ability, loss of professional identity and self-confidence are on the rise. These issues are reflected in a loss of professional presence which reflects on the organization and its clients.

This study aims to examine the correlation between burnout, self-esteem and quality of life in healthcare professionals employed in the hospital units of the Marche Region (Central Italy), also in relation to lifestyle changes caused by the use of alcohol, drug abuse and cigarette smoking (13-17).

Methods

The study was carried out in the following hospitals of the Marche region: Ancona, Ascoli Piceno, Camerino, Fermo, Jesi and Pesaro, as well as INRCA (Scientific Institute for Hospitalization and Health Care) and the Salesi (children's hospital) in Ancona.

A self-administered anonymous questionnaire survey was distributed. It was in two sections: the first contained the Maslach Burnout Inventory (MBI) and the second consisted of questions about the healthcare operator's lifestyle (18).

The "Maslach Burnout Inventory" has been validated at international level and consists of 22 items which appear as affirmations describing personal feelings and attitudes. The term 'user' refers to the sort of person treated by the healthcare professional. The healthcare professional can answer each item by using a value scale from 0 to 6, based on the strength of his/her feeling on the subject. Each one of the three subscales evaluating burnout, that is to say *Emotional Exhaustion (EE)*, *Depersonalization (DP)* and *Personal Accomplishment (RP)*, contain references which are spaced unevenly throughout the questionnaire so as not to influence answers in any way.

Before the questionnaire was distributed participants were informed about the aim of the survey and its importance and utility were stressed. The study was conducted in agreement with the latest version of the Declaration of Helsinki.

Excel and Access for Windows were used to archive data and to perform descriptive statistics. Statistical analysis was performed with X-Lstat software (19).

Descriptive statistics were used to analyze the distribution of variables. Qualitative data were described using frequencies and percentages. The Chi-square analysis and the Odds Ratio were applied to evaluate the differences between use of alcohol, smoking and drug abuse. The level of statistical significance was set at $p < 0.05$.

Results

Of 4.150 questionnaires distributed, 2.216 (corresponding to 53.4%) were duly completed and the characteristics of the sample have been summarized in Table 1.

An initial analysis of results shows that feelings of Depersonalization (DP) are high in all respondents (35.6%) as well as levels of Emotional Exhaustion (EE), which can be seen in 23.6% of respondents. The percentage of those who display high levels of DP and EE is equal to 22.3% of the sample. Results obtained for all levels of Emotional Exhaustion show an overall balance between the percentage obtained for low and high levels. Furthermore, adding the percentages for medium and high levels shows that they exceed low levels by 22.5% (Fig. 1). Regarding Depersonalization, medium-high levels exceed low levels by 18.5% (Fig. 1).

However, when it came to Personal Accomplishment, the vast majority of respondents reports no issues. Even by adding medium and high levels, the percentage (35.9%) does not exceed low levels (Fig. 1).

Emotional Exhaustion

Comparing levels of EE with the age of respondents, it can be seen that 56.1% of respondents over 50 years of age show high levels, while younger people

Table 1. Sample characteristics

Age group	Male no.	Male %	Female no.	Female %	n.a. gender no.	n.a. gender %	Total no.	Total %
Sample characteristics								
≤ 30	48	7.69	148	9.4			196	8.84
31-40	134	21.47	553	35.11			687	31.00
41-50	152	24.36	496	31.49			648	29.24
51-60	160	25.64	211	13.40			374	16.88
61-70	5	0.80	6	0.38			11	0.50
> 70	5	0.80	0	0.00			5	0.23
n.r.	120	19.23	161	10.22	14	100.00	295	13.31
Total	624	100.00	1575	100.00	14	100.00	2216	100.00
			no.	%				
Main activity								
General practitioner			18	0.81				
Physician			244	11.01				
Biologist			16	0.72				
Official			67	3.02				
Administration			38	1.71				
Employee			22	0.99				
Social worker			80	3.61				
Healthcare assistant			1271	57.36				
Nurse			36	1.62				
Psychiatric nurse			35	1.58				
Obstetrician			10	0.45				
Psychologist			18	0.81				
Therapist			30	1.35				
Head nurse			94	4.24				
Intermediate care technician			6	0.27				
Pharmacist			126	5.69				
Technical health worker			12	0.54				
IT specialist			6	0.27				
Trainee			12	0.54				
Dietician			2	0.09				
Community worker			21	0.95				
Telephone operator			6	0.27				
Ophthalmologist			46	2.08				
n.a.								
Time operating								
≤5			260	11.73				
6-10			388	17.51				
11-20			698	31.50				
21-30			568	25.63				
>30			215	9.70				
n.a.			260	3.93				
Time employed								
≤5			638	28.79				
6-10			457	20.62				
11-20			577	26.04				
21-30			331	14.94				
>30			122	5.50				
n.a.			91	4.11				

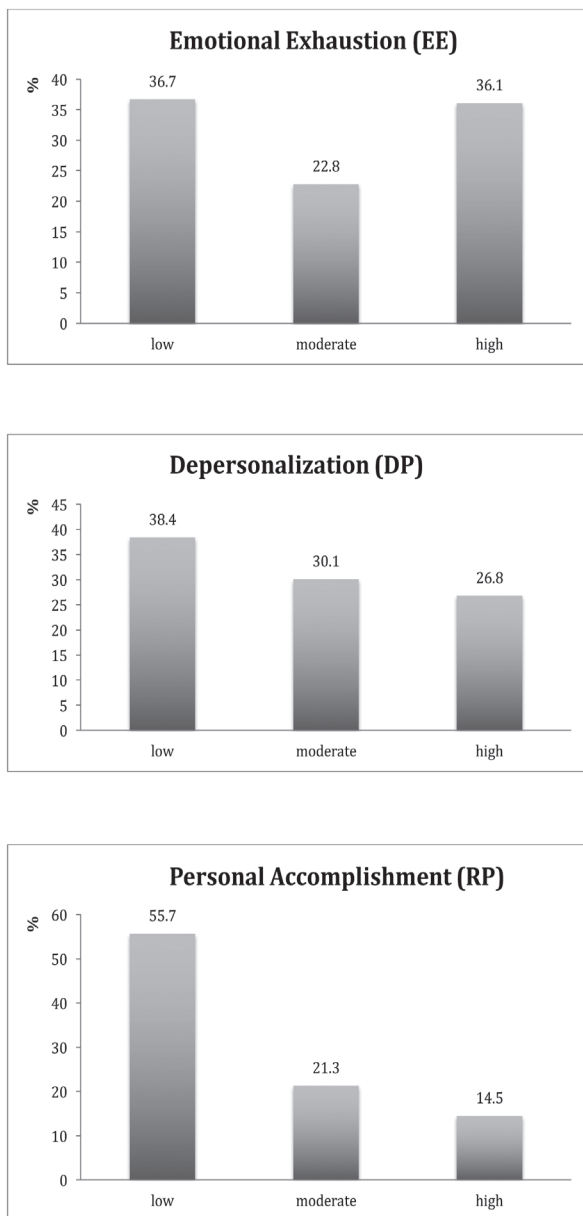


Figure 1. Percentage of overall levels of Burnout for all scales

(from 20 to 30 years of age) have lower levels of EE (43.8%).

Moving on to “how long” respondents have been in their current position, it is noted that the highest levels of EE are found in those who have been in the same job for more than 15 years (42.9% of cases).

Emotional Exhaustion can be seen in the extreme tiredness a worker might feel at the end of a day’s

work and this was found in 35% of healthcare workers; physical exhaustion concerns 50% of respondents. This is emphasized by feelings of having “worked too hard”, as seen in about 35% of respondents.

Feelings of exhaustion are exacerbated by the fact that over 30% of respondents already feel tired when they get up in the morning and have to face another day at work; the percentage of those who feel unable to carry on (15%) is relevant. More than 25% of respondents admit to being ‘stressed out’ by their job, a situation which can easily lead to feelings of frustration, as evidenced in over 20% of the sample.

Depersonalization (DP)

No differences can be observed between those who have been in the same role for a long or shorter period. More than 20% of the sample worry that their profession might, over time, desensitize them to clients’ requirements.

Personal Accomplishment (RP)

Results relating to Personal Accomplishment show that high levels prevail, thus showing an ability to make and maintain interpersonal relations, qualities of social openness and disinhibition and the ability to reach important goals. Furthermore, these respondents exhibit fewer symptoms of psychophysical distress and are more likely to give increasing importance to the social aspects of their job, such as relationships with colleagues and clients, as well as recognizing stimulating elements which are part of their activity.

If we look at the length of time the respondents have operated in the healthcare sector, it becomes obvious that levels of RP lessen as time goes by, with percentages equal to 62.7% and 65.93% in those who have been employed for 1–5 years or over 15 years respectively. An analysis of lifestyles, particularly alcohol and tobacco consumption, shows the possible existence of feelings of discomfort or unease which are potentially connected to Burnout Syndrome.

38.4% of respondents are smokers and, of these, 66.8% show low levels of job satisfaction; while 57.0% regularly consume alcohol. Specifically, regarding the category measuring EE levels, subjects showing high

scores are compared to subjects from the same category with low scores pertaining to exposure to cigarette smoke and alcohol. An analysis of data shows that exposure to cigarette smoke and alcohol is significantly higher in subjects with high levels of EE compared to those with low levels of EE (Table 2). The same can be said for alcohol abuse, with a slight difference in the Odds Ratio, in the RP scale. The highest significance for exposure to alcohol is seen relative to DP levels, while exposure to cigarette smoke is not significant (Table 2).

Conclusions

Our results show that worrying levels of Emotional Exhaustion, as well as medium/high levels of Depersonalization, can be seen in healthcare workers. Our results are in line with other studies which show increasing levels of EE and DP in healthcare workers, who compared to other work categories are known to be exposed to stressful procedures at work (2). On the contrary, data pertaining to Personal Accomplishment show that our sample is characterized by medium/low levels of stability. A possible explanation for this result could depend on the fact that when answering questions on psycho-physical health, respondents easily admit to feeling distressed but, when faced with questions on Personal Accomplishment, prefer not to admit that psychological distress might have a negative influence on their performance at work.

Healthcare workers who have been in the same job for a considerable amount of time (15 + years) show the highest levels of EE and DP. As shown by

other studies, this can be linked to the high levels of emotional exhaustion connected to long-term exposure to suffering in patients (20, 21).

Concerning lifestyle choices, some studies have shown that among the different work categories, healthcare workers show the highest percentage relating to substance abuse. Tobacco and alcohol abuse can be seen as a choice which is made to help tackle feelings of exhaustion related to work issues. It must also be said that the search for personal satisfaction does not necessarily depend on adverse working conditions. However, a situation of constant stress can lead healthcare workers to abuse alcohol, which is used as relaxant, tranquilizer and even as a form of evasion (22-24).

In light of these results, we believed it necessary to look deeper into the correlation between alcohol and tobacco abuse within MBI categories. In accordance with the literature, specifically, the highest levels of tobacco and alcohol consumption were found in subjects with high levels of EE and DP (25, 26). Subjects with high levels of Depersonalization show a worrying exposure to alcohol abuse, while those with high levels of Emotional Exhaustion tend to make use of both alcohol and tobacco, demonstrating lifestyle choices which aggravate a partially compromised psychophysical condition. It is interesting to note that, though results for personal realization are not worrying, subjects still display high levels of exposure to cigarette smoke.

To conclude, it could be said that working patterns for healthcare workers, which are in many cases more stressful than for other occupations, can generate feelings of unease which deplete emotional resources. Objective conditions and the type of work that is

Table 2. Odds Ratio: correlation of alcohol and cigarette consumption with EE, DP and RP levels.

Variables	Smoking (OR)	P-value	95% CI	Alcohol (OR)	P- value	95% CI
Emotional Exhaustion (EE) high <i>vs</i> low	2.92*	0.0365	1.06 to 8.06	2.35	0.0000	2.01 to 2.76
Personal Accomplishment (RP) low <i>vs</i> high	2.50*	0.0343	1.04 to 6.02	1.97	0.0124	1.15 to 3.37
Depersonalization (DP) high <i>vs</i> low	1.66	0.0005	1.24 to 2.21	4.67*	0.0000	3.01 to 7.24

*P-value correlation significant ($\alpha < 0.05$)

done still seem to be the main culprits for an insur-
gence of conditions which lead to Burnout Syndrome.
In healthcare workers, Burnout should not be under-
estimated: many factors associated with the onset of
this syndrome, such as organizational issues or con-
flict between working hours and family duties, might
be modified in order to increase emotional stability in
subjects whose occupation is characterized by marked
emotional involvement (27-30).

Conflict of interest: None to declare

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