"Burnout Syndrome in the health professions: analysis of aetiological factors"

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Introduction

In the '70s, Freudenberger drew attention to one of the possible manifestations of workplace stress, introducing the term "*Burnout"*. This term indicates a state of malaise found among workers in the so-called helping professions, especially in the social-health area.
Various studies document the high levels of workplace stress in hospital services. The incidence among doctors of alcoholism, cirrhosis, suicide and broken marriages leads to the urgent need to examine predispositional aetiological factors, clinical manifestations and strategies for managing workplace stress.

The three burnout factors

As described by C. Maslach (1982), burnout is identified by three concomitant factors:
- *Emotional exhaustion* (emptying of emotional resources). This is a feeling of tiredness and fatigue that gradually grows as the emotional resources are consumed, a feeling that one has nothing left to offer at a psychological level.
- *Depersonalization*. This refers to negative attitudes of detachment, cynicism and/or hostility towards the people with or for whom one works.
- *Lack of Professional realization*. This concerns the perception of one's inadequacy for one's work, entailing a lowering of self-esteem and a drop in the desire for success.

The four stages of burnout

The onset of the syndrome in health workers generally follows four steps (Bellani *et al.*, 2002)

- The *first stage* (idealistic enthusiasm) is characterised by the motivation that led the workers to choose a care-giving form of work, or conscious motivations (to improve the world and themselves, having a safe job, doing a job involving less manual work and more prestige) and unconscious motivations (desire to know themselves better and to exert a form of control or power over others).
- In the *second stage* (stagnation) the workers continue to work but they realise that the work does not completely fulfil their needs. The results of the great initial effort gradually become more insubstantial. There is thus the shift from an initial super investment to a gradual loss of commitment where the feeling of deep disappointment

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grows, making the worker shut himself off from the work environment and from and his colleagues.

- The most critical *stage* of burnout is the *third* (frustration). The worker's dominant thought is that he is no longer capable of helping anyone, with a deep sense of futility in that the service does not respond to the real needs of the users. The worker's experience is one of loss, of emptiness, a crisis of creative emotions and values considered fundamental up to that time. As an additional factor of frustration, there is the lack of appreciation by his superiors, and by his clients, as well as belief that his training is inadequate for the kind of work being done. The frustrated subject can adopt aggressive attitudes (towards himself and others) and often acts out behaviors of flight (such as unjustified absences from the division, extended breaks, frequent days off sick).
- The gradual emotional detachment deriving from the frustration, with the shift from empathy to apathy, makes up the *fourth stage*, during which the 'death of the profession' often occurs.

Burnout is not just a personal problem

The effects of burnout do not have repercussions only at a personal level but tend to spread erratically from one member of a team to another and from the team to the patients, therefore involving the whole organisation of the services as well as the single individual.
The consequences of all this are very serious and can be depicted in three levels (Maslach & Leiter, 2000):
- the level of the workers that "pay for" burnout, through somatisations, but above all through the wasting of resources (burnout has a "cost"), frustrations and underused of potential;
- the level of the patients, for whom contact with operators with burnout is frustrating, inefficacious and harmful;
- the level of the general community which sees sizable investments eaten up by the services.

Aim and method of the study

The purpose of our research is to analyse the different variables (age, sex, role, career seniority) that could lead to burnout.
The study we propose was carried out in the period between November 2007 and January 2008 in the division of Plastic and Reconstructive Surgery at the *Istituto Tumori* [Cancer Institute] of Genoa (IST) in collaboration with the Data Elaboration Service of the Biostatistics section of the *Dipartimento di Scienze della Salute* (DISSAL) [Department of health science] of Genoa.
It was carried out using an anonymous self-administered questionnaire, self-compiled, distributed to all the staff (staff doctors, specialising doctors, voluntary doctors and medical students).

The questionnaire was made up of:
- Personal information on the participants in the study
- First Part: Maslach Burnout Inventory (MBI)

It is a questionnaire drawn up some years ago by Dr. Christina Maslach (1982), specific for the qualitative and quantitative assessment of the state of burnout.
It consists of 22 items divided into three subscales assessing the three different aspects previously described (emotional exhaustion, depersonalisation and professional realisation). The questionnaire offers a quantitative assessment by identifying three

degrees of seriousness: low, medium and high; burnout is considered a continuous, non-dichotomic variable, which can be present or absent (see appendix).

Description of the sample

The participants in the study are 30 doctors: 7 (23.3%) staff doctors, i.e. those holding permanent positions in the hospital (with previous working experience), 13 (43.3%) are doctors doing their specialisation, 4 (13.4%) Voluntary doctors, 6 (20%) medical students. Of the participants, 14 (46.7%) are males and 16 (53.3%) are women. The age varies between 24 and 58 years (average age 30); for the analysis of the data we considered a cut-off point of 35 years: 24 (80%) are below that age while 6 (20%) are over 35. As far as career seniority is concerned, 24 (80%) have less than 10 years experience while 6 (20%) have over 10 years.

Summing-up and results

Using the Maslach Burnout Inventory, once the scores are calculated with standard correction grids, for the distribution of the results in the three risk bands (low, medium and high) we used the schema shown in table 1.

DEGREE	*EE (%)*	*DP (%)*	*CE (%)*
LOW	15 (50.%)	14 (46.7%)	5 (16.7%)
MEDIUM	11 (36.7%)	12 (40.0%)	11 (36.7%)
HIGH	4 (13.3%)	4 (13.3%)	14 (46.7%)

Table 1

We obtained the results shown in Table 2:

	EE	**DP**	**CE**
High	>24	>9	<29
Medium	15-23	4-8	30-36
Low	<14	<3	>37

Table 2

Figure 1

If we look at the first two pie-charts in figure 1, related to emotional exhaustion (EE) and depersonalisation (DP), the distribution of the data shows that a high percentage (about 50%) do not seem to risk developing a real burnout syndrome. This is confirmed by the third chart which shows that most doctors feel professionally fulfilled.
We could then consider possible variations of the results based on the subjects' age, to see if there is any correlation between factors:

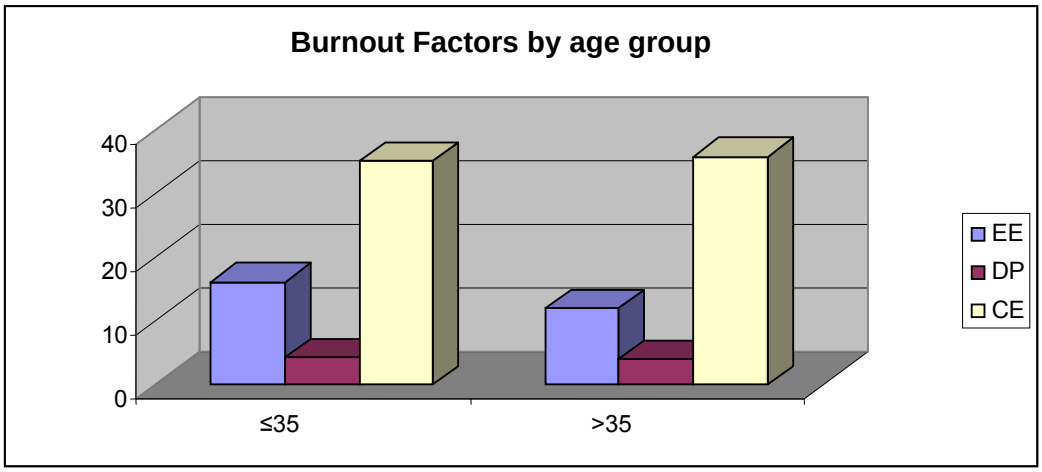

Figure 2

As can immediately be seen, the two graphs can be almost superimposed on each other. Therefore age does not seem to be an influential variable for burnout. Statistical tests confirm that it is not significant ($p>0.05$).
Similar results can be obtained by distinguishing between the results on the basis of sex (figure 3).

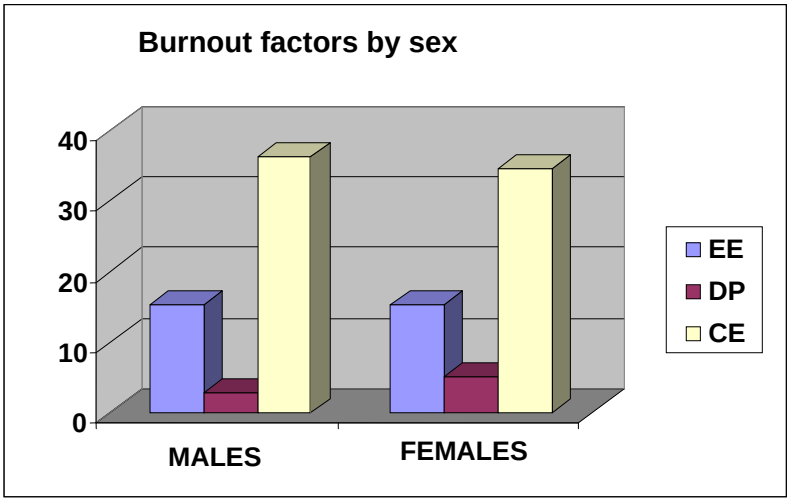

Figure 3

If we examine the distribution of burnout among workers performing different roles in the division, we have a distribution of this type (fig.4):

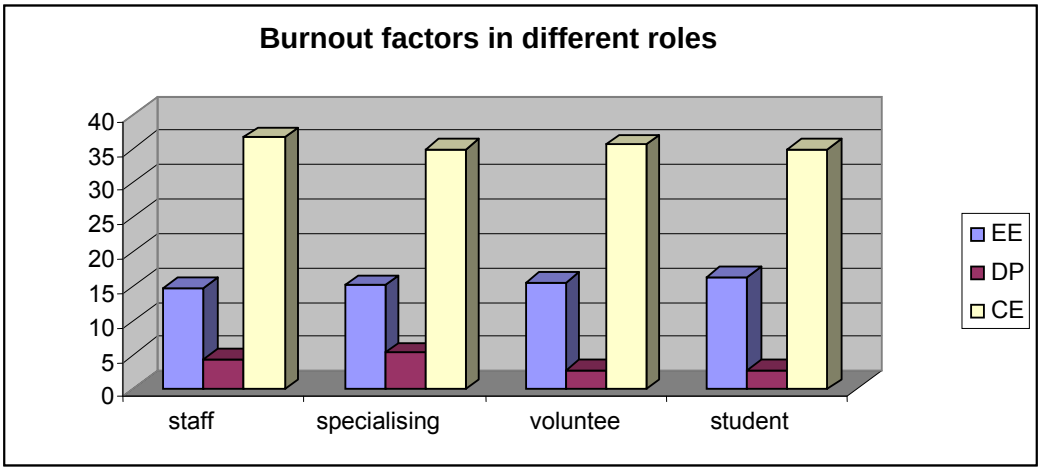

Figure 4

As figure 4 shows, the differences between roles does not appear to be significant, although this seems to contrast with what was initially hypothesised. In this case, too, through the Kruskal-Wallis Test, the results are shown to be non-significant ($p>0.05$).
In the next step, we consider career seniority as a risk factor for the development of burnout.

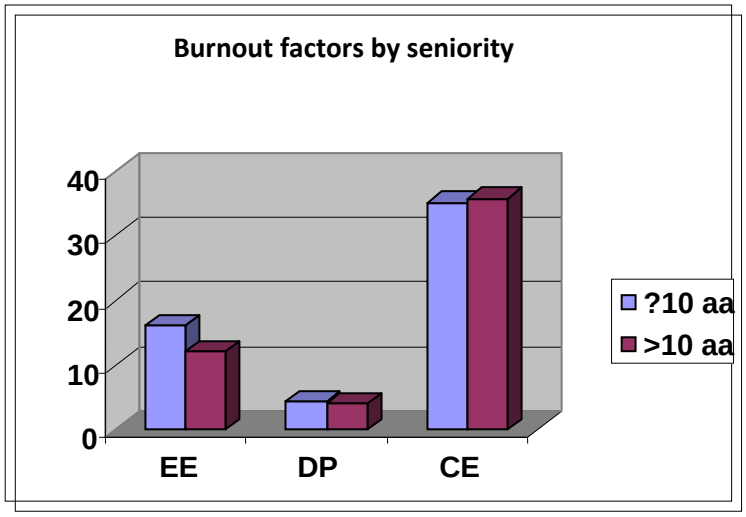

Figure 5

Figure 5 shows clearly that the total overlap of data on those with less than 10 years service and those with longer. In this case, however, it is rather improbable that, with a long exposition to these risk factors there is no increase in the likelihood of burnout. As was foreseen, in this case it can be said that it is merely a matter linked, as we shall see later, to the limits of our study.

Conclusions

The differences between the single variables (professional category, age, sex, seniority) observed in the group examined, in our view deserve to be reassessed. We are aware of the limits of our study. The results obtained, in fact, are based on a very small number (30) of subjects. From the statistical point of view, this invalidates the significance of the study compared to the conclusions that could be drawn from a study on a larger scale. It is also worth considering that confusing variables (bias) may occur during the administration of the questionnaires, which can give rise to unreliable responses.
Due to the smallness of the sample, our study at present represents a pilot study that with appropriate changes, can be extended to a wider sample of the population.

Prevention strategies

We summarise below some burnout prevention strategies (Nesci *et al.*, 2002; Payne & Firth-Cozens, 1999), considering various levels of organisation.

A – Staff development
- Reduce the self-imposed demands on workers by encouraging them to set more realistic goals.
- Encourage workers to adopt new goals that can provide alternative rewards.
- Help workers to develop and use control and feed-back mechanisms that are sensitive to short-term advantages.
- Provide frequent training opportunities to increase the efficiency of the role.
- Teach staff to defend themselves using strategies such as time management and techniques for structuring time.

- Give staff orientation by providing a booklet that realistically describes the typical frustrations and difficulties that occur on the job.
- Provide regular “burnout checkups” for all staff.
- Provide consultations focusing on work or meetings for staff suffering high levels of stress in their work.
- Promote support groups and/or systems for swapping resources.

B – Change in work and role structures
- Limit the number of patients that staff are responsible for at any one time.
- Distribute more difficult and less rewarding tasks among the staff members and expect staff to work in more than one role and program.
- Plan every day so that there is an alternation of rewarding and non-rewarding activities.
- Structure the roles so that workers can take a “rest period” when necessary.
- Use auxiliary staff (and volunteers) to give the staff the opportunity to rest.
- Encourage workers to take frequent holidays, even at short notice if necessary.
- Limit the number of hours worked by every staff member.
- Do not encourage part-time work.
- Give each staff member the opportunity to create new programs.
- Establish various career stages for all staff.

C – Management promotion
- Create training and development programs for present and future staff involved in supervision, emphasising the aspects of the role that administrators find most challenging.
- Create control systems for supervisors, such as staff surveys, and provide supervisors with regular feedback on their performance.
- Monitor role tension among supervisors and intervene when it becomes excessive.

D – Solving problems of Organisation and Decision-making
- Create formal group mechanisms for the solution of organisational problems and conflict resolution.
- Organise training for conflict resolution and solving group problems for all the staff.
- Accentuate staff autonomy and participation in decision-making.

E - Aims of the Center and Management Models
- Make goals as clear and compatible as possible.
- Develop an original, strong management model.
- Make training and research the main goals of the program.
- Share responsibility for treatments and therapy with patients, their families and the social community.

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