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Work stress and burnout among physicians and nurses in Internal and Emergency Departments

Paola Gnerre,[1] Chiara Rivetti,[2] Andrea P. Rossi,[3] Letizia Tesei,[4] Domenico Montemurro,[5] Roberto Nardi[6]

[1]Department of Internal Medicine, San Paolo Hospital, Savona; [2]Department of Emergency, Chieri (TO); [3]Division of Geriatrics, University of Verona; [4]Department of Medicine, Area Vasta 2, Ancona; [5]Internal Medicine, Padova; [6]Internal Medicine, Bologna, Italy

ABSTRACT

Burnout has been defined as loss of enthusiasm for work, feelings of cynicism, and a low sense of personal accomplishment. Work environment and working conditions exposes the individual to numerous factors of stress. Stress-related diseases are defined as burnout. The increased workload, the repeated reorganizations in the hospital with iterative downsizing suggestions and budget cuts, without any perspective of career progression, with a social culture of bureaucracy and blame, resulting both in subtracting direct care time with patients and in the fear by healthcare professionals from the burden of their responsibility, are the backgrounds on which more and more frequent cases of burnout may develop. We need to establish homogenous standards all over the national territory on workload and about the procedures that have to be implemented for the prevention of burnout in our wards.

Introduction

The term burnout (literally *listless*, *burst*, *exhausted*), was originally used in the world of sport to indicate the failure of an athlete to get more results after some success and or maintain those acquired.[1] In 1970 Herbert Freudenberger proposed the same term to describe the consequences of severe stress and high ideals experienced by healthcare workers.[2] In 1981, Maslach introduced a further-reaching definition and an instrument for measuring burnout, the Maslach Burnout Inventory.[3] Burnout is a syndrome characterized by extreme physical and mental fatigue and emotional exhaustion. It has been defined as loss of enthusiasm for work, feelings of cynicism, and a low sense of personal accomplishment.[4] Work environment and working conditions exposes the individual to numerous factors of stress. Stress has been categorized as an antecedent or stimulus, as a consequence or response, and as an interaction between the individual and the environment. Nevertheless, stress has been regarded as an occupational hazard and occupational stress has been cited as a significant health problem.[5] Stress-related diseases are defined as burnout.

A wide range of professions experience burnout, including physicians, nurses, and educators. Four sources of anxiety can be identified among health staff working: patient care, decision-making, taking responsibility, and change. In fact, health staff working is exposed to an important number of psychosocial risk factors as a consequence of the type of work (high intensity of workload, working alone, lack of social support, lack of free time, seriously ill patient, *etc.*). Reorganizations and downsizing have become an increasingly common stressful event in the health-care system and have been associated with a high degree of depression, anxiety and emotional exhaustion).[6-8] Falling reimbursement, downsizing, budget cuts, layoffs, reorganization efforts, and rising expenses, especially without rewarding systems and any perspective of career progression, all usually result in three things - more work intensity, more demands on time, more job complexity.[9] More work added to less rewards means dissatisfaction. Several other factors may contribute to burn out syndrome: first of all, bureaucracy in all of its forms and time consuming as hours spent devoted to work, separate from face-to-face time with patients, including documentary paperwork, sitting at the computer in compiling too many papers, the form

Correspondence: Paola Gnerre, Department of Internal Medicine, San Paolo Hospital, via Genova 30, 17100 Savona, Italy. Tel.: +30.019.8404082. E-mail: pgnerre@yahoo.it

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of which does not routinely augment patient care.[10] A recent study from the Mayo Clinic showed that in 2011, 45.5% of doctors reported that they felt burned out, and that number has now risen to 54.4% in 2014.[11] So we analyze the reasons for it.

Consequences of burnout

Burnout is associated with reduced work performance, professional commitment and health problems.[12,13] General symptoms of burnout are:[14] loss of energy, loss of optimism, loss of interest in work, resentment and hostility towards others (colleagues and patients), anxiety and a feeling of malaise. Consequences involve cognitive aspects (difficulty in concentrating and attention), somatization disorder (general malaise, easy fatigue, food and sleep problems, abuse of psychotropic drugs), emotional (state of anxiety, depression, feelings of incompetence, dissatisfaction, widespread sense of anger, fragility frustrations) and behavioral aspects (relationship difficulties, persecutory experiences, hyperactivity, passivity, aggression, hypercriticism, depression).[15] The onset of burnout syndrome in health-care workers generally evolves in four stages (Figure 1).[2] The first phase (*idealistic enthusiasm*) is characterized by conscious motivations that lead operators to choose the type of care work (to improve the world and themselves) and unconscious motives (desire to further self-knowledge and to exercise form of power over others). Expectations of *omnipotence*, immediate appreciation and improvement of their status drive the choice. In the second phase (*complaint*), the work does not meet expectations. The health professional feels disappointment that induces closure to the work environment and colleagues. The third phase (frustration) is the most critical. The operator feels a sense of worthlessness and lack of appreciation on both the leaders and patients. The subject can be aggressive (to himself or to others) and he often experiences unexplained absences, long pauses and frequent sick leave. The gradual emotional disengagement determines transition from empathy to apathy resulting in the fourth phase.[2]

Burnout in internists

Previous studies conducted at the University of Washington[16] showed that 50% of internists had depressive symptoms and 9% propensity to alcohol, with repercussions on care and educational quality. In a survey conducted on over 15,800 physicians from over 25 specialities,[17] the highest percentages of burnout occurred in critical care, urology, and emergency medicine, all at 55%. Family medicine and internal medicine follow closely at 54%. Internists responded that they were burned out and they reported greater severity in their own burnout. A higher percentage of oldest than youngest and female than male internists reported burnout. Women may also have more conflicts between work and home, particularly if they have children. In Figures 2 and 3 are shown the percentages of burnout for medical specialities and their related causes.[18,19] Too many bureaucratic tasks, too many hours at work, increasing computerization of practice, impact of the affordable care act, too many difficult patients and too many patient appointments in a day are the most frequent reasons of physicians' stress. Internists spend most of their time in hospital taking care of acutely ill patients.

So, what is the condition between Italians in-

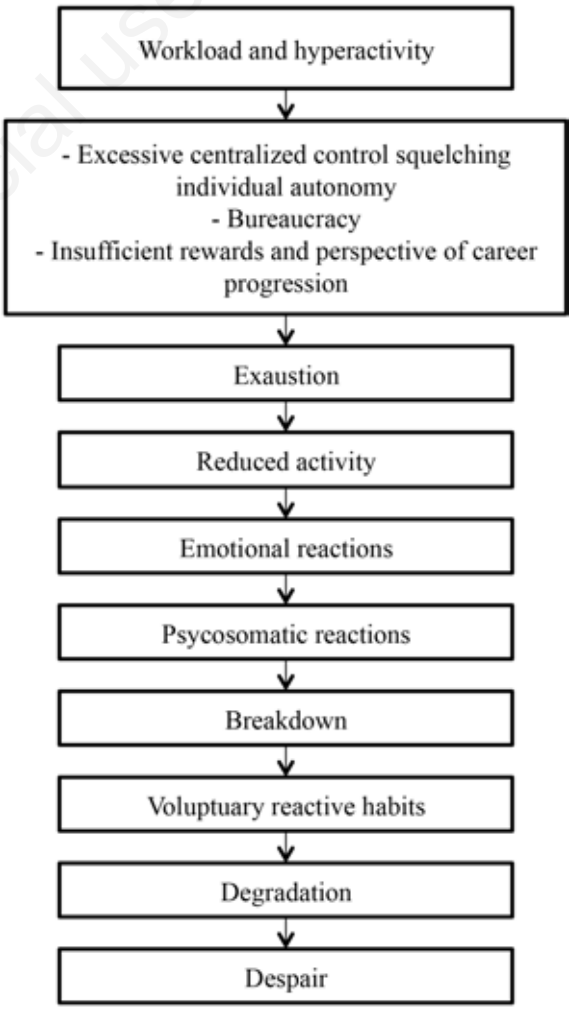

Figure 1. Burnout cascade. *Modified from Freudenberger and Richelson, 1980.*[2]

ternists? There are no Italian data on burnout among internists. The majority of the studies presented in the literature were conducted on doctors working in Emergency Departments and Emergency and Resuscitation Services, family doctors and residents. However, a recent survey shows high levels of burnout among Italian physicians. It would be interesting to evaluate the burnout among internists and nurses working in internal medicine. Most of the patients hospitalized in Internal Medicine come from emergency department with a high variability of case-mix and a significant high workload. Table 1, showing the most important characteristics of internal patients according to the FADOI COMPLIMED Study data,[20] confirms the complexity of patients hospitalized in our wards. The presence of dementia also exposes healthcare workers to depressive state and psychological stress in 20-50% of cases. Confined space, poor lighting, lack of ade-

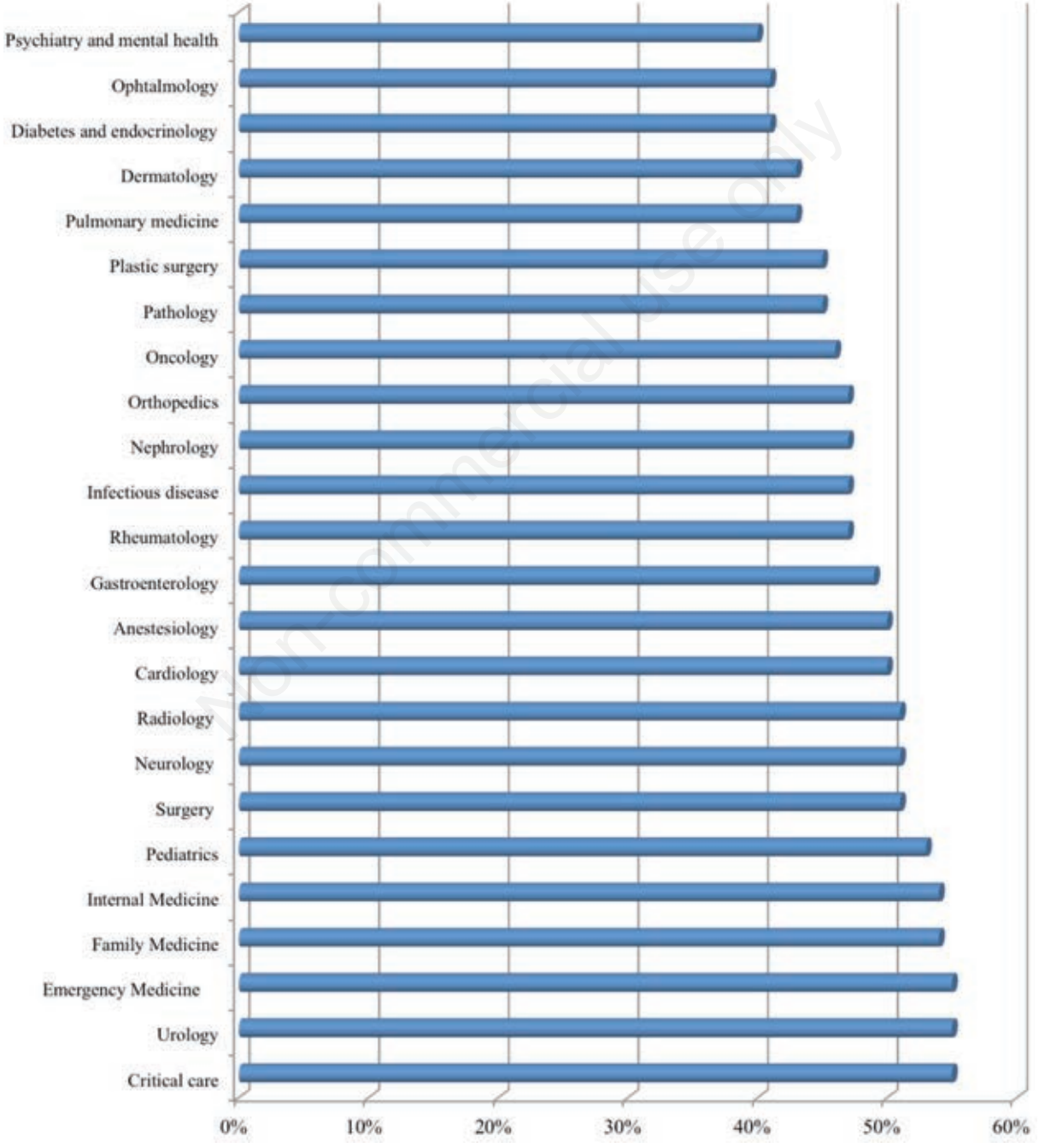

Figure 2. Specialities whose physicians are mostly burned out. *Modified from Shanafelt* et al.*, 2012*[17] *and Peckham, 2015.*[18]

quate space for staff, old tools, overcrowding of patients, the absence of a schedule of work shifts are additional stress factors. The resultant sleep deprivation and fatigue caused by these extreme work schedules pose potential threats to both physician and patient safety. Indeed, sleep deficits and extended working hours are associated with several chronic disease outcomes, such as diabetes, hypertension, cardiovascular disease, obesity, vascular events and sickness absences from work.[21] This survey confirmed what internists face: the highest combination of prevalence and intensity of burnout. Nurses are also particularly susceptible to the development of burnout mainly because of the emotional demands of their profession. Burnout can hit the best of nurses and physicians. Research suggests that the best health professionals - those detail-oriented, perfectionist, deeply compassionate souls among us - are at the highest risk of burnout. Why? Because their realities do not always match up to their high standards, and the resulting stress and frustration, over time, leads the physical and mental exhaustion that is characteristic of burnout. Conges-

Table 1. Internal medicine patient characteristics.[20]

Very old with a mean age of 78 years
He has an average of more than 3 concurrent diseases
1 patient out of 2 presents severe comorbidity with an organ and/or system impairment of then with a poor prognosis
70% of patients takes more than 6 drugs/die with all the accompanying difficulties of appropriateness and management of the adherence to the therapies
1 patient out of 3 is bedridden with some communication problems
1 patient out of 2 shows a negative perception about own lives
Over 80% of patients who need to be supported at home for the care and treatment (mostly derived from their family)
In 3% of cases there is not even a referring family
66.3% of pts had some major clinical event occurring during hospitalization

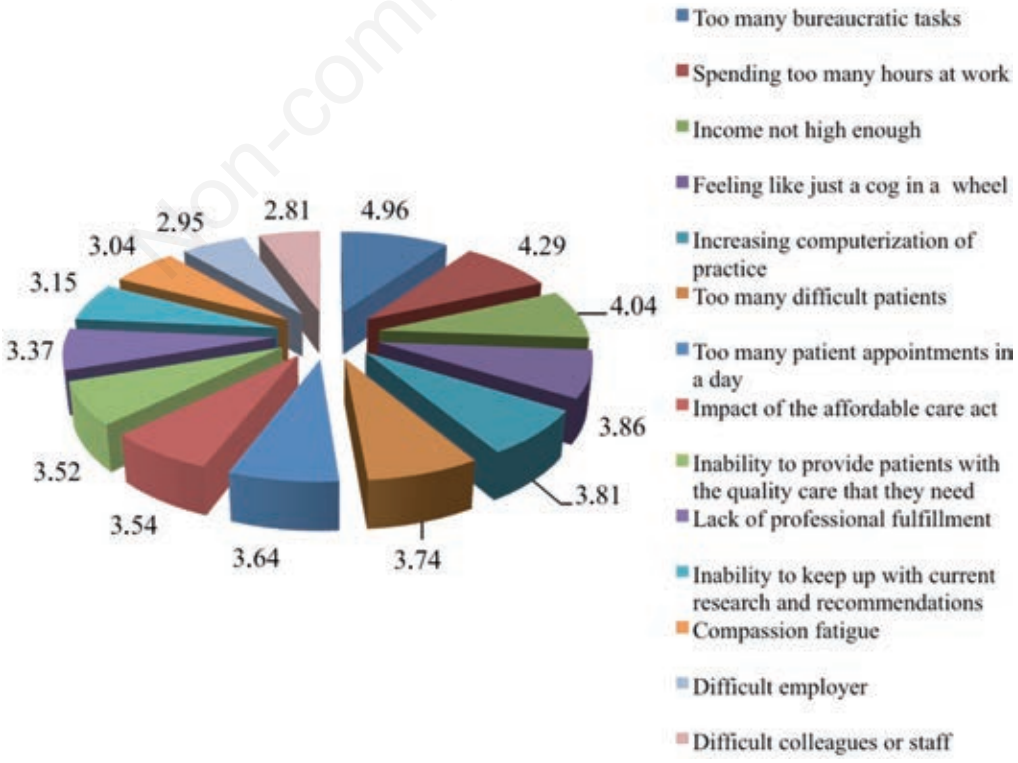

Figure 3. Causes of internists burnout. *Modified from Shanafelt* et al.*, 2012*[17] *and Peckham, 2015.*[18]

tion, overcrowding, the variety and complexity of cases, the severity of clinical situations, the social and family problems of patients, the impact of death, the *workload*, are specific risk factors for operators. Therefore, high levels of dissatisfaction can lead to burnout.

Burnout in Emergency Departments

According to Figure 3, the survey conducted by Medscape[17,18] in 2013 shows that specialities with the highest percentage of burnout are those that deal with severely ill patients (emergency medicine and critical care register 55% burnouts), and their physicians also report a greater degree of severity in their burnout. The majority of young internist are now working in Italy in the Emergency Departments (ED): this is the reason why we also evaluate the development of burnout in ED. ED is the second setting most involved in patients' claims (13.1%), just after orthopedics.[22] Being involved in a court case, in addition to the inevitable sense of guilt towards the patient, can result in media exposure that damages the public figure of the doctor before the trial. Moreover, the workload of the emergency physician is particularly heavy, long and uncomfortable shifts are more frequent than in other specialities: according to a recent survey[23,24] conducted on a sample of 1089 Italian physicians, 50.7% of the emergency physicians reports between 4 and 5 night shifts per month; 20.6% between 6 and 7. All the emergency physicians interviewed have to face two emergencies at the same time; in 79.3% of cases frequently (the highest percentage among all specialties). EDs in developed countries have been experiencing severe overcrowding, resulting in patients in hallways, full occupancy of ED beds, frustration for patients and ED personnel, and - most importantly - greater risk for poor outcomes (ED burnout was in fact significantly associated with higher frequencies of self-reported suboptimal care).[25] In addition, long waiting times, and resulting altered patient expectations, further stress the emergency personnel: ED staff - in particular the triage nurses - are regularly exposed to verbal and, in some cases, physical violence. Assaults are the third leading cause of occupational injury-related deaths and EDs are specifically identified as high-risk locations as for workplace violence. Among the causes of burnout in ED, it has to be highlighted the high risk of failure for complex care: in 2012-2013 a reduction in white and green codes occurred, in correspondence to an increase in red and yellow codes, which require immediate and complex treatments. The patients' breakdown by age shows a decrease in the younger population, and an increase in the elderly. In particular, a significant increase is observed in the segment of the over 65 years, also due to the progressive aging of the population. This results in a greater attendance of the emergencies by vulnerable people, often suffering from multiple diseases, which require a high level of care. The burnout levels tend to be higher in nurses than in doctors.[26] Besides, the level of dissatisfaction of the nurses in departments for acute pathologies is twice higher than those working in departments for long-term patients, presumably because of more severe workloads resulting in reduced time spent with the patient. This seems counter-intuitive, as the urgency working environment - usually requiring specific and advanced skills - is expected to offer greater personal rewards. However, nurses live more closely with patients and therefore often show a greater emotional involvement; besides, patients are more keen to express their frustration or anger on nurses than on doctors.

Burnout in the nursing staff

Nurses represent the single largest group of healthcare professionals in hospitals, and nursing care consumes a substantial proportion of hospitals costs.[27] Ideally, the demand for care and nursing staff match perfectly and influence outcomes positively, such as nurse-sensitive outcomes and adverse events or job satisfaction and absenteeism,[28] but several studies showed that nurses have been found to experience higher levels of stress- related burnout compared to other care professionals,[29] owing to the nature of their work.[30] The study of Nejad *et al*. showed that clinical nurses had the highest mean of burnout (82%), which was significantly related to work experience and a lack of social support and that the role of demographic factors such as age, gender, work experience, and place of employment in the creation of burnout cannot be ignored.[31] Particularly, the study of Burla *et al*. showed that 17% of the sample constituted by nurses of medical, surgical and pediatric field, result to be in burnout and that there are no statistically significant differences, despite a higher burnout level in the medicine sample is observed; this percentage is around 25%.[32]

Furthermore, the study of Viotti *et al*., showed no statistically significant differences in the emotional exhaustion value between Intensive Care Unit (ICU) and non-intensive care unit (non-ICU) workers, although the average score is higher for non-ICU workers. In addition, the ICU workers are more satisfied with their working lives than non-ICU workers. The level of autonomy could explain this result. This result is also associated with job satisfaction.[33]

Moreover, Burla and colleagues showed that the percentage of presence of burnout in critical care nurses is 0%, while for colleagues in wards it turns out to be 12%. Particularly, in equal proportion of personal accomplishment, the critical unit nurses have a greater

percentage of emotional exhaustion than those from ward, but the depersonalization component is much lower in the critical care unit nurses than in their ward colleagues. The results of this study, which upsets all expectations, have to chasten the institutions.[34] In general the research findings showed that, age and work experience were significantly related to burnout, indicating that younger nurse experience burnout to a relatively low degree, while burnout tends to be more prevalent in nurses over 41 years of age. A significant relationship was found between gender and burnout. Particularly, it is shown that female nurses suffered higher levels of burnout than male did.[35] High levels of burnout among nurses have often been attributed to prolonged direct contact of an emotional nature with a large number of patients. This, amongst other factors such as prolonged exposure to work related stress as well as low levels of job satisfaction, has also been recognized as factor contributing to high levels of burnout among nurses.[36] In nursing, role ambiguity, role conflict, responsibility for others' lives, work overload, poor relationship at work, inadequate salaries, lack of opportunities of progression, a lack of personnel, patient care, lack of support, staff issue and overtime, may have very significant implications for health and wellbeing of nurses.[37] Furthermore, since nurses reported that their staffing levels are inadequate to provide high quality care, an unrealistic workload may result in chronic fatigue, poor sleep patterns, absenteeism, and job dissatisfaction.[38] Burnout in nurses has been shown to lead to emotional exhaustion as well as loss of compassion of others and a sense of low personal accomplishment. Burnout nurses are more likely to be stubborn and inflexible. Their interest, initiative and sense of responsibility are gradually replaced by routine intervention, by indifference to patients, and eventually by depression, despair, mental and physical exhaustion.[39] Because professional nursing standards identify interprofessional collaboration as necessary for quality patient care, communication between nurses and physicians is needed to create a culture of safety for all patients and an supportive atmosphere of team across discipline.[40] Moreover, since hospital nurse staffing is of major concern because of the effects it can have on patient's safety and quality of care, greater numbers of nurses at the bedside help increase patient's satisfaction, improve quality of care, and increase nurse's mood, satisfaction, and retention.[41]

Some tools for the prevention and management of burnout

Preventing burnout requires multiple levels of intervention, which relate both to the organization of work and to specific measures for individual.[42] These interventions should improve the work planning and staff development increasing the cohesion of group and the autonomy of the individual and providing the emotional support (Table 2). The therapists and occu-

Table 2. Burnout prevention strategies.

Staff development
Reduce the demands imposed on operators by adopting more realistic goals
Encourage operators to adopt new targets that can provide satisfying alternatives
Provide frequent opportunities for training to increase the efficiency of the role
Teach strategies to better structure the working time
Provide periodic *burnout* controls to all the staff
Encourage the development of support groups and/or resource sharing systems
Work planning
Limit the number of patients for team working
Distribute among the staff members of the most difficult tasks and less satisfying
Plan the day's activities to switch between rewarding activities to those not satisfying
Encourage staff holidays
Ensure adequate rest periods after work shifts
Head of the nursing staff
Create training and development programs for coordinators
Check the coordinators tensions, trying to meet their claims
Create resilience barriers for a better organizational environment
Organization aspects
Organize meetings for conflict resolution and group problem solving
Accentuate staff autonomy and its involvement in choices
Management models
Make explicit goals
Develop a strong and original management model
Make training and research as major objectives of the program
Share the responsibility of care with the patients and their families

pational medical support should be required to manage meeting groups and individual interventions in high-risk cases. The general strategies of burnout prevention presuppose the knowledge and diagnosis of burnout, the evaluation of the work overload, the assessment of emotional needs and the personal ability to ask for help. In any case the complexity of the factors which are underlying burnout requires a systematic intervention on staff development and on organization aspects. Staff development treatment and prevention of burnout must be based on effective programs to reduce stress and improve the quality of life. The individual strategies must include the ability to motivate yourself. The use of awareness/mindfulness practices among health professionals has been shown to help them overcome the daily difficulties reducing burnout and increasing job satisfaction.

Therefore, prevention and treatment must focus on improving the individual's stress coping skills, optimizing their job situation and planning more time for rest.

Conclusions

Our organizations are working in most of the cases under stress, just trying to survive every day to the incessant deal of work.[43] This is a problem shared with several other European countries in public national health services but high-quality controlled studies on burnout syndrome are lacking. Therefore, there is a need for epidemiological and health-economic studies on the prevalence, incidence, and cost of burnout. In Italy, there are some really good examples of National Health Service organizations supporting their staff well and producing high levels of job satisfaction, but there is a need to establish homogenous standards all over the national territory on workload and about the procedures that have to be implemented for the prevention of burn out in our wards. Our profession is increasingly controlled by people not directly involved in day-to-day patient care. It is time for physicians to take back the leadership of their clinical practice.[44] We have to create better conditions for a happy workforce and for happier doctors in our hospitals.[45-47]

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