Professional profiles in the healthcare field and factors associated with the development of burnout

Paola Burla¹
Maria Elena Cinti²
Alina Sygiel³
Romeo Gatti¹
Franco Burla²

¹Complex Socio-Sanitary and Hospital “Villa Immacolata”, San Martino al Cimino, Viterbo, Italy
²Department of Neurology and Psychiatry, “Sapienza” University of Rome, Italy
³Citizen Advice Bureau, Manchester, UK

Corresponding Author:
Franco Burla
Department of Neurology and Psychiatry, “Sapienza” University of Rome, Italy
E-mail: franco.burla@uniroma1.it

Summary

Background: the present background of the Italian National Health System requires the health professionals not only specific technical and operational skills, but also relational skills. Fast-changing work and life patterns may bring about situations which can be difficult to adapt to, even to the point of creating confusion and bewilderment.

Objectives: the aims of this study are the evaluation of burnout and its relationship with environmental and organizational factors in healthcare professionals in the rehabilitation medicine field and the identification of professional profiles more exposed to the burnout within healthcare service.

Methods: our sample is composed of 114 health professionals (3 groups of 38 people each, Physiotherapists, Nurses and Hospital Auxiliaries), 42,98% males and 57,02% females, average age 37,8 years. The sample is given questionnaires for the evaluation of burnout, organizational health, and personality.

The scores comparison obtained from questionnaires was performed using SPSS software, version 17.0; have been applied: frequency analysis, Mann-Whitney test, one way ANOVA and post-hoc Scheffe test and were considered differences statistically significant with a p value <0.05.

Results: a medium degree of burnout is shown in 11,40% of respondents, and a high degree in 4,39%. Important differences are revealed in the perception of comfort in the work environment and of organizational efficiency, which are perceived as negative.

Major differences are shown as far as psychosomatic disorders are concerned and, although they do not reach a psychopathological level, they appear more frequently in those affected by burnout, who seem to be less motivated to succeed and featured by low level of self-confidence.

Conclusions: the results of this study suggest that the group with a high burnout and the risk group are influenced by the “personality variables” and by the “structural” and “organizational” variables, which contribute to the burnout state.

KEY WORDS: healthcare professionals, stress, burnout, personality factors.

Background

The current scenario of the Italian health system requires health professionals not only technical skills and operational specifications, but also relational skills that make use of careful, continuous and periodic assessment of the available resources. The fast changing work and life patterns produces situations in which the fit can be difficult enough to cause confusion and disorientation in dealing effectively with the underway changes.

Economic globalization has led to important changes in the nature of work and intensified the pressure on workers, who have to face to the growing uncertainty, and to the need for greater productivity, flexibility and employability.

The workers must produce more in less time and at any time: companies become factories of stress, where there are no more machines to fail, but the operators.

Known since the mid-eighties (1, 2), the burnout phenomenon in this reality has occupied a central role as a disorder that can affect particular categories of workers who, for professional reasons, are subjected to intense and prolonged stress factors.

It is a syndrome that, in its manifestations, causes emotional distress, the feeling of being overwhelmed and losing control of the situation (3); the symptoms are manifested in both cognitive and emotional, behavioural and somatic levels. The discomfort may particularly affect those who have invested more in the profession in terms of expectations and does not find the tools to control the situation (4): it creates a vicious cycle of frustration that, if not addressed directly, leads to adoption of strategies such as isolation and apathy, abandonment of activities and unhealthy life styles, etc.
The great interest in the burnout comes from the many consequences that entail both individually and collectively in terms of social spending, impaired health, professional-patient communication and a consequent lack of/oor poor access to the services and the resources (5). The phenomenon typically occurs in the helping professions (6): those professions that focus on the helping relationship defined as an “asymmetrical relationship” (7) operator-user, where the goal of the first figure is to develop and to enhance the other (8, 9). This relationship is decisive for the quality of working life of the operators who, in continuous contact with the suffering, need to appeal to all their knowledge and skills to effectively take charge of the issue. These circumstances make help professions a threat in a manner inversely proportional with the organizational support and training offered by the structure (10). According to Maslach and Leiter (11), these professions are high-touch (continuous contact), which implies direct and prolonged in time contact with people in distress and require immediate assistance.

A major reason that leads these professionals (especially social workers, health workers and teachers) to experience burnout is the living contradiction within the system in which they operate: on the one hand they feel the need to implement the contextual interventions to meet the needs of individuals, as each carries a different histories and different needs, on the other hand the organization requires, as argued by Del Leo (12), an uncritical adaptation to bureaucratic routine, with no creativity, and this leads very often to offer standardized services that fail to reach out effectively to the diverse users demands.

In addition to being subjected to urgent requests from the users, they must also meet the incessant organizational demands that require more work in less time with lesser sources and more people to control (patients, students, subordinates, etc.), thus increasing the risk that work overload may compromise the effectiveness of that aid activities, causing constant complaints that result by the dissatisfied users.

Generally those who experience this syndrome are exhausted both physically and psychologically as a result of social interaction with the patient but also by high levels of job stress and personal frustration and of perception of inadequate skills to the situation (13), and all this implies a negative response both to themselves and to their work.

The work organization itself is structured into several parts, each of which is a possible source of stress: the socio-environmental organizational and individual components contribute to the creation of organizational distress, defined as “any dynamic whether personal, social or institutional nature, which systematically prevents, although for a limited time, the achievement of organizational goals and/or psycho-physical health of workers” (14). These aspects can undermine mental and physical health of the subject and consequently cause of failure to achieve organizational goals.

The merit of having deepened and clarified this concept goes to Maslach, which in 1982 (2), defined burnout as a syndrome characterized by three dimensions:

- Emotional exhaustion, manifested by the sensation of having “burned” their psychological energy, with a sharp decline in their emotional resources, the subject is unable to restore.
- Depersonalization can be seen as a defence strategy that is manifested by indifference, cynicism about the emotions and needs of others, to avoid the feeling of threat perceived in the relationship with the user.
- Reduced professional accomplishment: the operator will tend to feel inadequate in performing the activity, will have a loss of confidence in the ability to perform effectively in their work and, increasingly, will tend to develop a sense of dissatisfaction, feelings of failure, lower self-esteem to their ability, feeling unable to help others.

The three symptomatic components configure the burnout syndrome as a multi-dimensional and follow each other in a dynamic evolution, which is seen as the key factor for the initiation of the emotional exhaustion process. This exhaustion are on the initial groundwork for the establishment of the other two conditions. In fact, the depersonalization represents a typical response to burnout’s stress and is configured as a reaction to emotional exhaustion when the latter is not faced by adequate coping strategies. As regards the decrease of job satisfaction, it would be only in part result to high levels of depersonalization, being influenced also by many others: ability to interact with others, self-esteem, knowledge and/or experience levels, salary, working bonuses, etc. (5).

According to the Buunk and Schuufell’s (15) interactional perspective the job burnout stems from a lack of reciprocity between people involved in a helping relationship. In fact, this lack of reciprocity is not only characteristic of burnout in the helping professions, but also in other types of organizational contexts characterized by the imbalance between investments and individual expectations and what is received in exchange from the organization.

Schaufeli and Enzmann’s (16) propose to include in the category of interpersonal stressors, as well as those related to the relationship with the user, also those related to any type of emotionally significant relationship in the workplace, such as the relationship with boss, colleagues, employees, which help to understand the burnout phenomenon in a more current perspective.

Many studies have focused on identifying any personality traits that contribute to the onset of syndrome (17, 18): according to the literature many individual characteristics affecting vulnerability to the job stress and burnout as a psychosocial phenomenon. The socio-demographic variables (19, 20), the personality variables including locus of control, the degree of flexibility, the type A personality, etc. (1), the idealization and the individual motivation (21, 22), the previous work experience, the incidence of life outside work and finally the incidence of the historical and cultural context play an important role as burnout cofactors.

Among the organizational factors, however, many studies include those related to work organization, on which the worker can do nothing and therefore create the conditions for the onset of burnout: the role structure and the workload, the remuneration and the ca-
The costs are paid by the individual under form of personal problems at the physical, psychological and behavioural levels, as well as consequences for the organization that is likely to incur in low productivity but also in the lack of cooperation by those who are suffering from this syndrome (Tab. 1).

As professionals in the health professions are at stake almost the whole person in helping and supporting their users, if the organization does not give credit to the human dimension of the service and focuses mainly on the revenue objective, operators will tend to be wary of that and offer an inadequate service to people, it is assumed, then, that "the activities of social workers who work to meet the demands of its customers are at risk of stress and burnout, especially if the conditions to meet appropriately their expectations as well as those of people who turn to their professional service" (23). According to Bettinardi et al. (10) study, in 2008, conducted on six categories of health workers of Rehabilitation Medicine, the climate perceived and trust towards the organization is experienced differently by experienced operators. Especially among the employees, staff and graduate nurses detects a greater sense of adequacy, accountability and organisational integration compared to the other operators. The organizational climate is also correlated with burnout, indicating the close connection between a collaborative work environment as perceived and characterized by a continuous exchange of information on organisational knowledge, with the psychological well-being experienced by employees. This study shows an interaction between organizational and personality variables in determining the right conditions for burnout takes and develops. So attention to these elements should help in becoming aware of the risk factors for these professionals and lead to consider burnout as a real disease not to ignore, considering the related issues, which require an effective management covering prevention methods aimed either to the individual, both the group and the organization.

Prevention means avoiding the pervasiveness of the phenomenon because, as stated also by Cherniss (1), is highly contagious among people who relate in the employment context, but also means avoiding all the conditions that hinder the professionalism of the operator and cause damage well as the organization and the individual himself, even to users that the service is targeted.

Objectives

The objective of this study was to investigate the presence of burnout and its relationship with environmental and organizational factors of health professionals employed in the rehabilitation medicine, in particular to highlight the level and the quality of the working discomfort's states. Within the health professions for workers in contact with patients is possible to develop burnout's phenomena and that within the various categories of its may exist differences in this regard. This study aims to identify any individual or organisational factors that may affect and then to identify possible professional profiles more susceptible to burnout within the organization.

Methods

In the period from May to July 2009 were administered to 114 health workers a series of questionnaires to test whether there was a significant relationship between personality and organizational variables and the burnout. Health professionals come from a nursing home in the province of Viterbo, which carries out rehabilitation of persons with physical, mental and cognitive disabili-ties, offering to the user of Rehabilitation Post-acute Phases, Residential Health Care, long term care with LAI rehabilitation (vegetative states), Outpatient Services, semi-residential and home care services. The 114 subjects were divided into 3 groups of 38 units each, respectively: Physiotherapists, Nurses and Auxiliaries. The sample is composed of 49 males and 65 females with a mean age of 37.8 years. 56 subjects were graduates, 21 have a master degree, 12 high school diploma, 11 had attended a vocational school and 14 junior high school diploma (Tab. 2).

The 34.21% of the subjects is single, the 57.90% is married or living with, the 7.02% is separated or divorced and the 0.87% is widowed. Subjects have on average one child.

Table 1 - The cost of burnout by the Maslach and Leiter (2000).

<table>
<thead>
<tr>
<th>Consequences of burnout for the individual</th>
<th>Consequences of burnout for the organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical problems: headaches, gastrointestinal disorders, high blood pressure, muscle tension, chronic fatigue, increased susceptibility to disease, and psychosomatic symptoms, change in eating attitude. Mental health problems: anxiety, depression and sleep disturbances, guilt, isolation, altered mood, lessen ability to listen. To cope with the stress some people increase the use of alcohol and drugs. The exhaustion and negative feelings can affect the friendship and family relations.</td>
<td>Decline in the quality and quantity of work done. At work, people feel more stressed and lose their ability to handle problems. They retire from work so much psychologically as physically: absenteeism, turnover. Invest less energy and time in business, doing what is necessary. It reduces creativity. People are no longer willing to offer it.</td>
</tr>
</tbody>
</table>
The type of employment contract for subject is 78.95% for an indefinite period and 21.05% on fixed contracts, the regime is rather full-time hours for 91 subjects and part-time for 23 subjects. The average hours worked each day are 7 and the average outstanding is 1.85 h/day. To the subjects in the sample were administered the following rating scales and tests:

- MBI (Maslach Burnout Inventory);
- MMPI-2 (Minnesota Multiphasic Personality Inventory);
- ACL (Adjective Check List) real self and ideal self;
- MOHQ (Multidimensional Organizational Health Questionnaire).

The procedures, the purposes of the research and the specific instructions for completing the questionnaires were presented to the operators individually giving a guarantee of anonymity to each participant. To evaluate the presence of burnout was used the Maslach Burnout Inventory, by Maslach and Jackson (24), in Italian adaptation of it standardized by Sirigatti and Stefanile (25), currently the most widely used in research and organizational clinic. It consists of 3 subscales: Emotional Exhaustion (EE), which examines the feeling of being emotionally parched and exhausted by their work; Depersonalization (DP), which identifies a cold and impersonal response toward people who receive the professional service; Personal Accomplishment (PA), which measures the sensation on expertise and desire for success in working with others.

The answer mode is set on a Likert scale to 7 steps ranging from "never" to "every day". In order to compare the individual subscales of MBI in an easier way were considered the values relating to tertiles. Scores are considered high if they fall in the upper tertile of the distribution, average if they fall in the middle tertile and low if they fall in the lower tertile (Tab. 3).

Given the limited knowledge about the relationships between aspects of the syndrome (26, 27) scores for each subscale are considered separately and not combined into a single score: a high degree of burnout can be seen from high points in the Emotional Exhaustion and Depersonalization subscales and a low score on the Personal Development scale, an average level of mean scores in three subscales, a low level is qualified by a high score of Personal Development combined with low scores for the other two scales.

For the personality profile were used the Minnesota Multiphasic Personality Inventory (MMPI-2) in the adapted Italian version of Pancheri (28) and the Adjective Check List (ACL) in the Italian version of Gough, Heilbrun and Fioravanti (29).

The Minnesota Multiphasic Personality Inventory (MMPI-2) of Hathaway and McKinley (30) is a broad spectrum’s personality test, helpful in assessing the major structural features of personality and emotional disorders: includes 567 dichotomous response items (true / false) and consists of 3 scales offering a validity range of 10 clinical scales that cover the traditional core of referred psychopathological categories (hysteria, depression, hypochondria, psychopathic deviation, paranoia, psychoaesthesia, schizophrenia, mania, social introversion), 12 additional scale help to explain the basic steps and investigate the nature of the various disorders (including additional categories such as alcoholism, drug addiction, marital distress, post-traumatic stress disorder, etc.) and 15 content scales, which allow to describe and predict different personality variables (including anxiety, compulsiveness, anger, low self-esteem, family problems, work problems, etc.). The cut-off is 65. The Adjective Check List (ACL) is an idiographic free choice test that allows the self-description and consists of 300 adjectives from which the person choose to mark the ones that seem appropriate to give a complete, analytical and differentiated of real self and ideal self (29). The real Self scale indicates all the concepts, perceptions, experiences and the feedback that people give of themselves as they see and believe they are. The ideal Self scale indicates

### Table 2 - Socio-demographic variables.

<table>
<thead>
<tr>
<th>Socio-demographic variables</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- M</td>
<td>49</td>
<td>42.98</td>
</tr>
<tr>
<td>- F</td>
<td>65</td>
<td>57.02</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- graduate degree</td>
<td>56</td>
<td>49.12</td>
</tr>
<tr>
<td>- master degree</td>
<td>21</td>
<td>18.42</td>
</tr>
<tr>
<td>- upper secondary school diploma</td>
<td>12</td>
<td>10.52</td>
</tr>
<tr>
<td>- professional diploma</td>
<td>11</td>
<td>9.65</td>
</tr>
<tr>
<td>- secondary-less school diploma</td>
<td>14</td>
<td>12.29</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- single / never married</td>
<td>39</td>
<td>34.21</td>
</tr>
<tr>
<td>- married / cohabiting</td>
<td>66</td>
<td>57.90</td>
</tr>
<tr>
<td>- separated / divorced</td>
<td>8</td>
<td>7.02</td>
</tr>
<tr>
<td>- widower</td>
<td>1</td>
<td>0.87</td>
</tr>
<tr>
<td>Type of contract</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Indefinite</td>
<td>90</td>
<td>78.95</td>
</tr>
<tr>
<td>- Fixed-term</td>
<td>24</td>
<td>21.05</td>
</tr>
<tr>
<td>Time regime</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Full time</td>
<td>91</td>
<td>79.95</td>
</tr>
<tr>
<td>- Part time</td>
<td>23</td>
<td>20.18</td>
</tr>
<tr>
<td>Mean age</td>
<td>37.8</td>
<td></td>
</tr>
<tr>
<td>Average daily hours of work</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Overtime hours daily averages</td>
<td>1.85</td>
<td></td>
</tr>
</tbody>
</table>

The Minnesota Multiphasic Personality Inventory (MMPI-2) of Hathaway and McKinley (30) is a broad spectrum’s personality test, helpful in assessing the major structural features of personality and emotional disorders: includes 567 dichotomous response items (true / false) and consists of 3 scales offering a validity range of 10 clinical scales that cover the traditional core of referred psychopathological categories (hysteria, depression, hypochondria, psychopathic deviation, paranoia, psychoaesthesia, schizophrenia, mania, social introversion), 12 additional scale help to explain the basic steps and investigate the nature of the various disorders (including additional categories such as alcoholism, drug addiction, marital distress, post-traumatic stress disorder, etc.) and 15 content scales, which allow to describe and predict different personality variables (including anxiety, compulsiveness, anger, low self-esteem, family problems, work problems, etc.). The cut-off is 65. The Adjective Check List (ACL) is an idiographic free choice test that allows the self-description and consists of 300 adjectives from which the person choose to mark the ones that seem appropriate to give a complete, analytical and differentiated of real self and ideal self (29). The real Self scale indicates all the concepts, perceptions, experiences and the feedback that people give of themselves as they see and believe they are. The ideal Self scale indicates

### Table 3 - Categorization of MBI subscale scores to the Italian standardization*.

<table>
<thead>
<tr>
<th>MBI Score</th>
<th>MBI Score</th>
<th>MBI Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>DP</td>
<td>PA</td>
</tr>
<tr>
<td>≤ 14</td>
<td>≤ 3</td>
<td>≥ 37</td>
</tr>
<tr>
<td>15-23</td>
<td>4-8</td>
<td>30-36</td>
</tr>
<tr>
<td>≥ 25</td>
<td>≥ 9</td>
<td>≤ 29</td>
</tr>
</tbody>
</table>

*Sirigatti, Stefanile, 1993.
rather all the features that people want to possess in terms of values, behaviours, attitudes. The ACL is a versatile test that can be used to provide different information about the subject (an idea, a theory or almost anything else).

So in this work the ACL was used both to describe the real self and ideal self, and to describe the operator’s attitude towards patients of their care and to describe the health care professional’s perception of what is real and the ideal health care professional (29).

The test includes a grill composed of 37 scales that cover 5 specific areas: the modus operandi of the person, his needs, his originality and intelligence, his peculiarities and finally the information for his transactional analysis. Berne’s transactional analysis model theorizes the Ego as consisting of three structures represented graphically as a single personality, namely the three ego states, each with their own functions: Parent, Adult, Child (31). The normal range is between ranging values from 40 to 60.

As regards of the organizational health analysis, was used MOHQ-Multidimensional Organizational Health Questionnaire of Avallone and Paplomatas (32), based on the “organizational health” construct, according to which the attention moves from the individual levels of stress to the overall level of welfare in a working reality, assessed by measurement of the individual perception compared to fourteen dimensions of organizational health (e.g. clarity of objectives, equity, safety culture and prevention) and three indicators outcome. The questionnaire allows to monitor the organizational health dimensions in the work context, as a whole and/or for individual sectors. The information collected is processed and summarized and represents a “snapshot” of the organization for how it is “seen” and perceived by employees, in terms of greater health areas and well-being and the most critical areas on which it is hoped an improvement and development intervention. The organizational health indicators are parameters that detect features of the work context and its actors. The test identifies 12 positive indicators (such as satisfaction and willingness to commit to the organization, the feeling of being part of a team, a sense of self, the belief that they can change the current negative conditions, etc.) and 13 negative indicators (resentment towards the organization, feelings of uselessness and insignificance, the intolerance in the workplace, irritability, etc.).

The scores comparison obtained from questionnaires was performed using SPSS software, version 17.0; have been applied:

- frequency analysis,
- Mann-Whitney test
- one way ANOVA and post-hoc Scheffe test

and were considered differences statistically significant with a p value <0.05.

Results

A first frequency analysis of the Maslach Burnout Inventory (MBI) has shown the presence in 96 operators from 114 (84.21%) low degree of burnout (including 30 therapists, 30 nurses, 36 auxiliary), in 13 operators (11.40%) average degree (including 5 physiotherapists, 6 nurses, 2 auxiliaries) and in 5 operators (4.39%) high-grade (including 3 nurses and 2 physiotherapists) (Fig. 1, Tab. 3).

The analysis carried out by one way ANOVA revealed no significant differences between the three professional figures with regard to the burnout as total score, but differ significantly regarding the Depersonalization subscale (F = 4.904, p <0.01). In particular the Physiotherapists have on average higher scores (Ft = 7.03) than the other two professionals (Nurses = 5.76; Aux = 3.21) demonstrating a greater degree of cynicism and detachment from work and from the users of their services (Fig. 2).

Then we passed to the detailed analysis of the other tests variables in relation to the risk-burnout “and” absence of burnout “groups”, by inserting in the first group subjects with medium-high MBI scores and in the second group those with low scores for highlight the differences between the subjects at risk and those who were not: The data were pooled to compare the perception of organizational health and personality characteristics of those who have a low risk of burnout and those with moderate and high risk. In doing so we obtained a sample of enough size to perform the statistical analysis. Regarding the organizational health (MOHQ), the demographic variables such as sex, marital status and number of children do not affect the “burnout risk”. Mann-Whitney test were significant, with p<0.05, the differences in variables “Perception of comfort working environment”, “Perception of leadership skills”, “Perception of efficiency of the organization” are seen, in the “risk-burnout” group as negative with an increase of the “Stress Perception” and “Psycho-somatic disorders”: there is an overall increase in “negative indicators” with a reduced degree of “overall satisfaction” (Fig. 3).

For the MMPI-2 the two variables that have values significantly higher in “risk-burnout” group even if not at pathological levels, are “Hypochondria” among the clinical scales and FAM; presence of conflicts in the family, among those content (Fig. 4).

The ACL test analysis of real and ideal self, the ACL healthcare real and ideal, the ACL attitude on the patient, showed that factors associated with the medium-high level of burnout relate to the ACL and the ACL patient’s real self (p <0.05), regarding the comparison between the two groups for other versions of the ACL (ACL ideal for the professional, the healthcare real and ideal ACL ) there are no significant differences. The ACL mode as real self in the “risk-burnout” group are lower values, thus is indicative of a negative view of themselves, compared with “no-burnout” group, in the variables “Need of success”, “Need Domain”, “Confidence in himself”, “High self-esteem” (Fig. 5).

With regard to the patient ACL in view of the patient from “burnout-risk” group is the most obvious use of unfavourable adjectives in the description of the same; decrease significantly the values of the scales: Number of unfavourable adjectives marked, Common re-
sponses, Need to domain, Need to persevere in the effort, Need to understand others, Need to protect and help others, Need to join the other, Need to be in relationship with the opposite sex, Need to show deference, it only increases the Potential for control (Fig. 6). The one-way ANOVA and Scheffe post-hoc test (p

Figure 1 - Burnout Level in health care workers (percentage MBI). Data are expressed in percentages.

Figure 2 - Burnout Level in health professionals (the MBI subscales average score). The data are expressed in mean scores. * p <0.01

Figure 3 - Variables associated with the organization work of the levels of burnout (Mann-Whitney U test). * p < 0.05
Figure 4 - Scale MMPI-2 compared to the burnout levels (Mann-Whitney U test).
* p < 0.05

Figure 5 - ACL real self in relation to the burnout levels (Mann-Whitney U test).
* p < 0.05

Figure 6 - Patient description of the ACL test compared to Burnout levels (Mann-Whitney U test).
* p < 0.05
<0.05) applied to the MOHQ’s variables have revealed the critical issues in relation to the three groups of workers: physical therapists, nurses and auxiliaries and their perception of organizational health (MOHQ: negative values < 2.6, positive values > 2.9) (32) (Fig. 7). As for the “Perception of management” is to be noted that is negative for the physiotherapists: 2.4 score and positive, although in lesser degree, in nursing and in the auxiliary (respectively 2.9 and 3.0), the “Perception of organizational efficiency” is positive only in the latter two figures (respectively with scores of 3.1 and 3.2). Interestingly, the data on “Organizational Equity/Fairness” lived in a sharply negative by all the professionals (Phys 2.0; Nurse 2.3; Aux 2.3); the judgment “Openness to Innovation” is negative in the physiotherapists and the nurses (2.2 and 2.6), normal in the auxiliaries, the “Perception of stress” is on the lower level of normal values in physiotherapists (2.6) while, for the nurses and auxiliaries, we find a significant positive perception (3.8 and 3.6). The figure “Openness to Innovation” is on the norm for the auxiliaries, the “Psycho-somatic disorders” are present in all three categories. In the assessment of “Negative indicators” it should be bear in mind that it indicates the negative perception if the value is greater than 2.9, positive if less than 2.6: 3.0 value the for physiotherapists, 2.4 for the auxiliary. What gives the overview of the Perception of organizational health is the “General Satisfaction”: negative in nurses and physiotherapists (2.2 and 2.6), on the norm in the auxiliaries. To be noted that among the items listed above are also those significantly associated to the burnout as a possible risk factor.

Discussion

Data analysis shows a low percentage of subjects in high burnout (3 physiotherapists, 2 nurses: 4%) is taken out, however, the presence of 13 subjects (5 physiotherapists, 6 nurses and 2 auxiliary: 15%) with average levels of burnout in a situation that is not pathological but with the possibility of developing the syndrome. Data not necessarily to generalize since the small number of subjects. The three professional figures not seem to differ regarding the total scores of burnout, but from the subscales analysis is noted a significant difference about the values of Depersonalization which are higher for Physiotherapists than for the other two categories, which show a greater degree of cynicism and detachment from work and hence could benefit from the recipients of their services. Between the various possible causes of this situation we can assume a greater stress found in contact with the patient who is for a greater time period than for the other figures (in average an hour a day, every day) and the relationship is single operator -user, for which they become privileged referents of all their concerns, both positive and negative, although not strictly related to issues relating to diseases with a higher intake of responsibility by the physiotherapist. The patient also opposes the Physiotherapist a resistance during the treatment which involves in each case one of their considerable effort and, at times, issues related to pain symptoms. Then, in general, for physiotherapists but not for the other two professionals there are a lack of structured breaks during working time between the patients.

Regarding the “Organizational health”, through MOHQ analyzed (32), we have seen that the significant variables have different values for the three professionals, according to the work performed type, the level of culture and expectations and the place where exerts its profession. Among the factors associated with the syndrome in the “burnout-risk” group does not cover personal factors: gender, marital status and children. While going to affect the comfort of the working environment, the perception of leadership, efficiency increasing the perception of stress and psychosomatic disorders with a low level of overall satisfaction. No reason for the job type burnout (physical and mental fatigue, emotional overload, isolation, etc.), Interper-
sonal relationships between colleagues or other professionals, the presence of conflict is not handled by the body within tolerable limits of community and the perception of organizational equity/fairness issues (Fig. 7).

The data on the personality variables provided by the MMPI-2 reveal, in the risk-burnout operators, the significant presence of the scale "Hypochondriacs", although in values below the threshold of psychopathology, characterized by an excessive concern for their health, the presence of psychosomatic disorders with little or no organic origin and unwillingness to accept the reassurances about not having anything from the physical point of view. Another scale that differs significantly those at risk of burnout from those without symptoms of burnout is the "FAM": indicator of the presence of specific conflicts in the family (Fig. 4).

The ACL real self (Fig. 5) shows us in the "risk-burnout" a framework of operators with personality variables that may be associated with the burnout development: low values of the "need for achievement", "need for domain", "self confidence" scales and "high esteem" scale tend to show a weak and not assertive person in dealing with people: submissive, anxious, afraid of involvement, may have difficulty in defining the limits in the report of help coming to have little control over the situation, suffering from the demands put to him, coming to an emotional overload. He/she also has little self confidence, little ambition, has neither a defined objectives set of, nor the determination to achieve them. The vision of the patient varies significantly for some of the ACL scales: in the "risk-burnout" group is the most obvious use of unfavourable adjectives in the description of the patient being perceived as a person with less ability to persevere in the effort, less willing to understand the others, more interested in himself than of engage external relationships, both with the people the same or the other sex, but with a greater lack of submission and more inclined to demand attention. The patient is perceived as a problem difficult to handle (Fig. 6).

The second analysis shows possible problems in the organization and how they are perceived by three professionals: physiotherapists, nurses and auxiliaries. Through this second reading of the MOHQ data was possible also to note that other variables may affect the onset of burnout (Fig. 7).

The "Perception of management", already included in the significant burnout levels scales has negative values for the physiotherapists and positive values for the categories: nurses and auxiliaries. This is probably due to the dislocation of gyms (in the same building that also houses the executive offices) bringing to have a closer and consistent contact with management, also the degree of "system efficiency" is positive only in the nurses and assistants. We can infer that what is experienced as a source of stress by physical therapists is the relationship with management, perceived as little able to make the employees participate in work decisions and little available to active listening.

The "Organizational equity", a factor that affects the burnout in the previous analysis, is, however, perceived negatively by all the professionals: there is an awareness of a lack of criteria and pathways for clear accountability, incentives, career, etc. That are not explained and made public and is not given to all equally access to them. The "Openness to innovation" that physical therapists and nurses consider lacked is an indicator of a certain organizational "stiffness", little inclined to the flexibility, to openness to change and to consider outside as a resource for its own. This perception is in the categories in which the level of educational attainment is higher and where the call for greater cultural and technological innovation is greater. It should be noted, however, that in the "open question" in the MOHQ, there is a strong demand for training and information in support staff.

How is the literature (18, 33, 34) also in our sample, the "Perception of stress" appears to be a burnout variable incident. The stressor factors are felt more by physiotherapists, confirmed by the highest levels in MBI tests described above, which also have a higher incidence of "psycho-somatic disorders", and higher in the scale "negative indicators" and "Satisfaction" measure of how the organization is globally perceived, research object: in the case of this sample is perceived in a negative way. Even for the Nurses group the "Satisfaction" is negative overall despite having a high value on the "Positive indicators", the Auxiliary, in the sample, seem rather to have a normal perception of the organizational health, while being aware of discomfort related to criteria by which people and their work are valued, and distribution of incentives. You may groped to explain this fact that, feeling less involved in organizational decisions, respond defensively and emotionally detaching themselves from the organization, refusing excessive "involvement" with the same structure while retaining their critical judgment on equity.

Conclusions

Results analysis give the possibility to note how different variables can be associated with the burnout development. The variables relating to the organization seem to be important factors in creating a favourable environment to the burnout phenomenon. A negative perception of leadership seems to be a burnout risk factor, while a perception of lack of organizational equity/fairness in our sample does not seem to affect burnout.

If we consider personality factors we note that subjects who exhibit burnout higher levels show to focus their concerns about their well being and seem to have family problems that may affect their job performance. But family conflicts can take an ambiguous role in the occurrence of burnout, as it is not possible to determine whether family conflict worsen the situation or is burnout to affect relations within the family. The subjects of the sample appear anxious, afraid of the excessive involvement, may have little control of the helping relationship, not showing sufficient capacity to handle the demands that are placed from outside, until you reach an emotional overload. Limita-
Professional profiles in the healthcare field and factors associated with the development of burnout

The development of burnout in healthcare professionals should be an area of concern for administrators. Burnout is a pathological condition that is defined by the interaction between the high demands of the job and the individual's efforts and personal resources. The recent increase of burnout among the healthcare workforce has led more and more to reconsider strategies and interventions to reduce its incidence and severity. To date, the evidence concerning the prevention of burnout is not robust enough to allow a broad generalization to the sample of interest. The purpose of our study is to perform a review and analysis of the research on burnout from the last 20 years in order to test the effects of interventions and management policies on the work environment. The general framework presented so far, but in its orientation value, indicates some directions to go to more accurately identify possible measures to contain and possibly to reduce the burnout of the operators in order to ensure a serene work that reflects on the effectiveness and performance and on the personal life. In light of the results becomes a decisive strategy to prevent the possibility of intervention which act primarily on five main areas:

**Staff Development**
- Encourage operators to adopt new targets that may provide alternative sources of gratification
- Help operators to develop and to use control mechanisms and feed-back sensitive to short-term benefit, to improve the perception of comfort inside the working environment
- Provide consultancy focused on work or meetings for the staff who is experiencing high levels of stress during work.

**Changes in work and roles structures**
- Limit the number of patients whose staff is responsible for a certain period
- Distribute among the staff members more difficult assignments and less rewarding and require from the staff who work more than in one role and program
- Plan every day so that activities are rewarding and non-rewarding alternate
- Give each staff member the opportunity to create new programs.

**Development Management**
- Create training programs and development for current and future personnel dedicated to oversight, emphasizing those aspects of the role that administrators have more difficulty in coping
- Develop supervisors control, such as staff surveys, and provide staff supervision of regular feedback on their performance.

**Problem solution and organizational decision-making time**
- Create group formal mechanisms for the organizational problem solution and for conflict resolution
- Organize training for conflict resolution and group problem solving for all staff.

**References**


