

ANALYSIS OF ORGANIZATIONAL HEALTH AND BURNOUT AMONG NURSES FROM SURGICAL, MEDICAL AND PEDIATRIC FIELDS

ANALISI DELLA SALUTE ORGANIZZATIVA E BURNOUT FRA GLI INFERMIERI DI AREA CHIRURGICA, MEDICA E PEDIATRICA

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Abstract

Background: In the present social scenery the progressive focus of the services for the people appears as a complex phenomenon with advantages and limits tied up to the risk that the society and the organizations are not adequately able to govern its proper workers dynamics. The organizations have the role to mediate between the human being characteristics (motivations, objective, needs) and those of the work place environment, trying to create an equilibrium. When they fail in this assignment, the work environment becomes useful field to rise up some organizational pathologies, such as burnout.

Objectives: The objective is to evaluate the different burnout levels in nurses of surgical, medical and paediatric fields and to individualize possible working and individual factors with the purpose to know the influential causes of satisfaction and dissatisfaction which determine the involvement, motivation and appointment levels with which the subjects manage the relationship with the organization.

Methods: The sample is constituted by 155 nurses divided in 3 groups, 50 of surgical field, 55 of medical field and 50 of paediatric field, to which have been administered some questionnaires directed to evaluate the organizational health, personality characteristics and burnout risk factors.

Results: The 17% of subjects of the sample result to be in burnout, but meaningful differences don't be underlined among the subjects belonging to the different departments. Instead result meaningful the differences related to the perception of job environment comfort, work stress and among the subjects in burnout and those not at risk. Organizational health is felt differently among the nurses from different fields: medical and surgical nurses perceive the working environment in more negative way in comparison to those from paediatric field.

Discussion: It seems to exist a hold relationship between the burnout, the years of job and the distance from the employment place in examined nurses. In them exists a real lost of the ability to persevere in the assignment and to respect the professional duties.

The only one note of relief, in the difference among the various categories, shows that the paediatric nurses altogether express some most positive evaluations of the various aspects of job condition.

Conclusions: It appears necessary to solicit the business organizations and the various institutions with the purpose to compile a interventions plan aimed to reduce the risk factors and at the same time to furnish a support to those people that are already affected from burnout and to their families with the purpose to make them easier and rapid a gradual re-entry in the social and professional life.

Riassunto

Introduzione: Nell'attuale scenario sociale la progressiva centralità dei servizi alle persone appare come un fenomeno complesso, con vantaggi e limiti legati al rischio che la società e le organizzazioni possano non adeguatamente governarne le dinamiche proprie della persona che lavora.

Le organizzazioni hanno il ruolo di mediare tra le caratteristiche dell'essere umano (motivazioni, obiettivi, bisogni) e quelle dell'ambiente, cercando di creare un equilibrio. Quando non riescono in questo compito, l'ambiente diviene campo utile per l'insorgere delle patologie organizzative, quali ad esempio il burnout.

Obiettivi: L'obiettivo è valutare i diversi livelli di burnout in infermieri di area chirurgica, medica e pediatrica ed individuare eventuali fattori di lavoro e individuali al fine di conoscere i motivi di soddisfazione e d'insoddisfazione influenti nel determinare il livello di coinvolgimento, di motivazione e d'impegno con il quale i soggetti gestiscono il rapporto con l'organizzazione.

Metodi: Il campione è costituito da 155 infermieri divisi in 3 gruppi, 50 di area chirurgica, 55 di area medica e 50 di area pediatrica, ai quali sono stati somministrati dei questionari volti a valutare la salute organizzativa, caratteristiche di personalità ed fattori di rischio burnout.

Risultati: Il 17 % di soggetti del campione risulta essere in burnout, ma non si evidenziano differenze significative fra i soggetti appartenenti ai diversi reparti. Sono invece risultate significative le differenze relative alla percezione di comfort dell'ambiente di lavoro, di stress e fatica fra i soggetti in burnout e quelli non a rischio. La salute organizzativa è vissuta diversamente fra gli infermieri delle diverse aree: gli infermieri di area medica e chirurgica percepiscono l'ambiente lavorativo in maniera più negativa rispetto a quelli di area pediatrica.

Discussioni: Sembra esistere una stretta relazione tra il burnout e gli anni di lavoro e la distanza dal posto di lavoro degli infermieri esaminati. In essi esiste una reale perdita della capacità di perseverare nel compito e di rispettare i doveri professionali.

L'unica nota di rilievo nella differenza tra le varie categorie, lo mostrano gli infermieri pediatrici che esprimono complessivamente delle valutazioni più positive sui vari aspetti della condizione lavorativa.

Conclusioni: Appare necessario sollecitare le organizzazioni aziendali e le varie istituzioni al fine di redigere un piano di interventi mirati a ridurre i fattori di rischio e allo stesso tempo a fornire un supporto a coloro che già sono affetti da burnout ed alle loro famiglie al fine di rendere loro più facile e rapido un rientro graduale nella vita sociale e professionale.

Background

In the present social scenery the progressive centrality of the services for the people appears as a complex phenomenon with advantages and limits tied up to the risk that the society and the organizations are not adequately able to govern employee dynamics. If the changes *cannot*, the organizational disruption *should not be* ignored. To say that an organization "cannot" ignore a change means to affirm that is essential to note that the developments in the business world are often looking for, induced and managed consciously. And to say that "should not" ignore the organizational hardships means that, if they are present, they cannot be faced with the consideration they deserve. If the organization underestimates them, or doesn't have the resources to deal with them or is not able to adequately prevent them, the fact may cause remarkable costs in terms of effectiveness and efficiency both respect to the production cycle and to the human resources operated within it.

Particularly related to the working environment is the Burnout phenomenon, known since mid-eighties (1, 2), disorder that can affect particular categories of submitted workers, for professional reasons, to intense and extended stress factors.

This syndrome, in its manifestation, causes emotional uneasiness, the feeling to be overwhelmed and to lose the control of the situation, with cognitive, emotional, behavioral and somatic symptoms (3).

According to Maslach (2) burnout can be defined as a psychosomatic syndrome with coexisting three fundamental dimensions: "emotional exhaustion", in terms of feeling emotionally dried up and feeling exhausted from own job, "depersonalisation", meaning detachment and indifference to both labour and the client to whom is offered the service and lack of "personal fulfilment" that behaves mistrust in their skills and inhibition of the success desire.

Del Rio (4) also argues that the Job Burnout is a "self-reinforcing process", because the emotional detachment and pessimism lead to "failure in the helping role" and "the failure conducts to a further discouragement" which, in a spiral process, hands to "a further failure."

To rise up of the Burnout is therefore due, according to Maslach and Leiter (5), to six identified discrepancies among person and job which develop when: the individual is job overloaded; doesn't have the full control of what he/she does; is not compensated for what does in suitable way; lives a crisis in the sense of community and affiliation; is not fairly treated; lives conflicting values.

Given these causes Maslach proposes a series of consequences identified in the affected by this phenomenon subjects as the appointment and emotional deterioration and the adaptation problem between the people and the job.

Then exist some individual risk factors that somehow predispose the individual to manifest the syndrome proper symptoms: it seems that burnout is more frequent among subjects aged upper to 30-40 years, not married and with higher cultural level, that face difficulties with passive and defensive attitude, don't show openness to change and show a perception of low control of their ability to handle the events. Also the attitude toward the job assumes an important role: those people who work a lot and harshly have more probability to incur in the burnout syndrome, probably because they feed notable expectations for their profession (6).

The burnout phenomenon is manifested in specific way into the *helpings professions*, focused on the helping relationship defined as a "asymmetrical relationship" (7) operator-consumer, in which the first figure intends to develop and to increase the other (8, 9).

These circumstances make at risk the healthcare professions in inverse proportion with the organizational aspects and educational supports offered by the structure (10) and with the increasing demands in terms of both quality and quantity of production (5).

The work organization is structured into several elements, each of which is a possible source of stress: social-environmental, organizational, individual components contribute to the creation situations of organizational distress.

The organizational discomfort, or better still, organizational pathology, means "any dynamics, of personal, social or institutional nature, that systematically prevents, albeit for a limited time period, the achievement of organizational goals and/or damage the psycho-physical health of the employees (11).

The definition highlights how an individual pathology, that undermines the psycho-physiological health of the subject, may be due to the failure in achieving the organizational goals.

According to the Miller and Miller's theoretical perspective of living systems, the pathologies are underlined when in the organizations (understood as systems endowed with subsystems with increasing levels of complexity and different levels

of importance and power) are activated expensive trials to remedy the dysfunctions (in the internal communication processes, in the lack of information or in an excess of these in contrast among them) without succeeding in eliminating the causes (12).

Nicholson (13) sustains that the social organizations have the role to mediate between the human being characteristics (motivations, objectives, needs.) and those job environmental, trying to create an equilibrium. When the organizations don't succeed in this assignment, the surrounding environment becomes useful field to rise up some organizational pathologies: to prevent the free expression, the emotional reaction and the personal fulfilment, to hinder the community cohesion and, excessive rigidities, become in general, kindly elements to uneasiness rise up inside the enterprises. The excessive job load, the continuous pressing organizational demands, which to carry out individual doesn't have suitable tools, can induce the subject to physical and mental energies exhaustion, with consequent reduction of productivity, appointment and creativeness, causing consistent financial and productive losses for the organization.

Objectives

Starting from these premises the objective of the present study was to evaluate, through this survey, the different levels of Burnout risk in health workers in surgical field, belonging to the same healthcare service structure and working in different departments of the same one, to identify possible organizational or individual factors associate to the Burnout risk, and finally to identify and to compare the sources of uneasiness related to the nursery in surgical, medical and paediatric fields.

The usefulness of a tense investigation aimed at determining the degree of employee satisfaction, consists in the possibility to know influential causes of satisfaction and dissatisfaction in determining the involvement, motivation and commitment levels with which the subjects manage the relationship with the organization.

Methods

The sample is constituted by 155 nurses, 65 males and 90 females (middle age 40,6 years; ds 104) divided in 3 groups: 50 of surgical area, 55 of medical area and 50 of pediatric area, employed in the hospital departments of The Policlinico Umberto I in Rome.

The period of the data survey has been inclusive between April and July 2010.

The subjects included in the present study are nurses of surgical, medical and pediatric departments and have chosen voluntarily to participate in the investigation, protected by the anonymity.

The correspondents evaluation tools have been used for the interest variables:

- Burnout Level: MBI (Maslach Burnout Inventory)
- Organizational Health Analysis: MOHQ (Multidimensional Organizational Health Questionnaire)
- Psychopathological Profile: SCL-90 (Symptoms Check List)
- Personality Profile: ACL (Adjective Check List) real self, ideal self
- The patient's perception: Patient ACL (Adjective Check List)

The Maslach Burnout Inventory (MBI) (14, 15) is composed of 3 subscales: Emotional Exhaustion (EE), that examines the feeling to be emotionally dried up and exhausted by own job; Depersonalisation (DP) that identifies a cold and impersonal answer towards the people that receive the professional service; Personal Accomplishment (PA), that measures feeling related to own competence and to own desire to succeed in working with the others. The scores are considered high if they fall in the upper tertile of the distribution, middle if put in the middle tertile and low if fall in the lower tertile (for a more detailed description see 16).

The Adjective Check List (ACL) is an idiographic and free choice test that allows auto-description and allows to underline the Real self and Ideal self perception (17). The Real self version points out all the concepts, the perceptions, the personal stories and the self evaluations, while the Ideal self version points out all the characteristics that the subjects would want to possess in terms of values, behaviours and attitudes. The test allows to be used for furnishing subject's different indications and in this study has been administered the same version that allowed to describe the operator's attitudes toward the patients of whom they take care(17). The test foresees a grid composed by 37 scales covering 5 determined areas: the individual modus operandi of the person, needs, originality and intelligence, peculiarities and finally the information for translational analysis. The range of normalcy is inclusive among values ranging from 40 to 60.

Compared to a previous work of several authors (16) the MMPI-2 test has been replaced with the SCL 90 (Symptom Checklist -90), scale for easier handling and labeling, which assesses both clinical and non-clinical subjects: measuring a wide range of psychological problems and psychopathological symptoms, emphasizing both internalizing symptoms (depression, somatisation, anxiety) and those externalizing (aggressiveness, hostility, impulsivity) (18) and consists of nine main symptoms dimensions:

- Somatisation: reflects the tied up uneasiness to the perception of own body dysfunctions; the symptoms focus on the cardiovascular, gastrointestinal, respiratory apparatuses etc.
- Obsessive-Compulsive disorder: is focused on the thoughts, impulses and actions experimented as persistent and irresistible, of ego-dystonic or unwanted nature.
- Interpersonal Hypersensitivity: stings on the inadequacy and inferiority feelings, particularly in comparison to the other people.
- Depression: are also included feelings of desperation, suicidal thoughts and other cognitive and somatic correlated to the depression.
- Anxiety: understands general signs of anxiety as nervousness, tension, tremors, panic attacks and feeling of terror.
- Hostility: reflects thoughts, feelings, behaviours, characteristic of a negative affective state of anger.
- Phobic Anxiety: is defined as a persistent fear reaction to a specific person, place, object or situation, perceived as irrational or disproportionate in comparison to the stimulus.
- Paranoid Ideation: projective thought, hostility, suspiciousness, grandeur, self reference, fear of the autonomy and deliriums are all primary expressions of this disorder.
- Psychoticism: represents the construction as a continuous dimension of the human experience and it contains indicative item of withdrawal and isolation as the schizophrenia first rank symptoms.

The aspects of organizational health were analyzed through the MOHQ - (Multidimensional Organizational Health Questionnaire) (19), which focuses on the individual's perception of comfort from those who complete the questionnaire relative to a working reality: provides indications on the organizational health dimensions (for instance clarity of objectives, equity, safety culture and prevention) and three outcome indicators. The questionnaire allows to screen the organizational health dimensions in the working context as a whole structure and/or in individual sectors, the information collected is processed and summarized, and represent a "snapshot" of " the way it is "seen" and felt by employees, in terms of greatest wellness and health areas and the most critical areas on which is desirable an improvement and development intervention.

The results have been submitted to statistic analysis through Who Square Test and of Mann-Withney's U using the S.P.S.S., 17.0 ver. software.

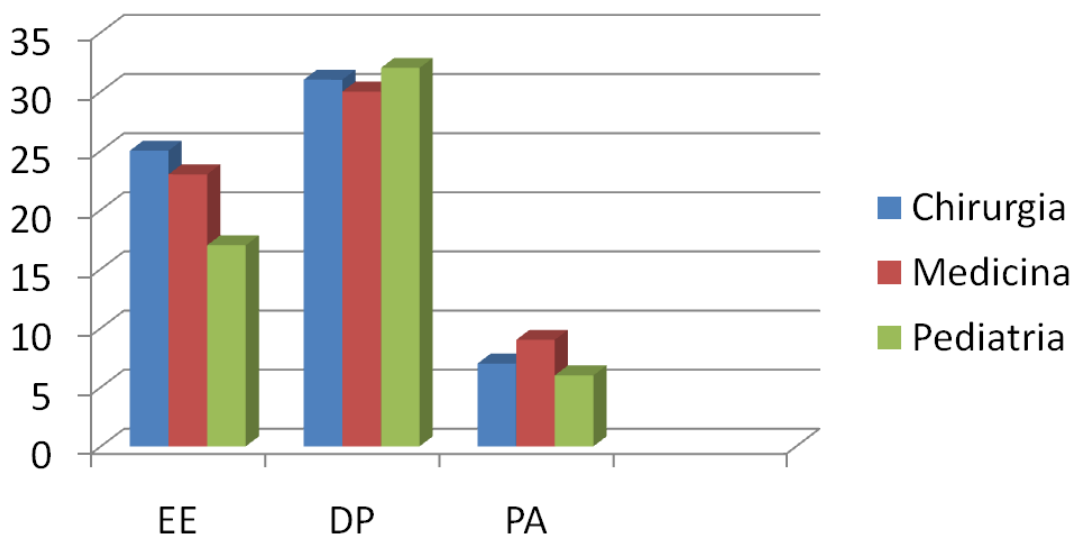
Results

The MBI Test, Maslach Burnout Inventory, showed that 17% of subjects in the sample is found to be in burnout (chart 1), there are no statistically significant differences between the three departments, despite is observed a higher burnout level in the medicine sample, this percentage is around 25%. With regard to the three components of burnout, Emotional Exhaustion, Depersonalization and Personal Fulfilment, identified by the MBI Test there are no significant differences between healthcare workers in different departments (fig.1).

Chart 1 - Professionals categories in Burnout's (MBI) classes frequencies

M.B.I.	Burnout absence	Burnout presence
Nurses n. 155	83%	17%
<i>Chirurgia n.50</i>	84%	16%
<i>Medicine n. 55</i>	75%	25%
<i>Pediatric n. 50</i>	90%	10%

Fig.1 – Average scores of MBI in professional categories



In base to the emerged scores on the MBI Test the healthcare workers have been divided in 2 groups:

- burnout absence group;
- burnout presence group.

We have compared therefore the two groups and we found no statistically significant differences in the demographic qualitative variables: gender, marital status and children (chart 2). Through the Mann-Whitney's U have been made comparisons with regard to the quantitative variables to the MOHQ Test (chart 3): the subjects in burnout are older than those who do not show burnout symptoms, they have more years of employment, are employed for more time in the current administration and they employ more time to reach the workplace.

Chart 2 - Comparison and X^2 test between Burnout and demographic qualitative variables

		BURNOUT ABSENCE 128 Healthcare workers	BURNOUT PRESENCE 27 Healthcare workers	X sign *p<,05
SEX	M	83,01%	16,09%	,019*
	F	82,2%	17,8%	
MARITAL STATUS	Celibate	83,6%	16,04%	,082
	Married	81,8%	18,2%	
CHILDRENS	Yes	82,4%	17,6%	,004*
	No	82,8%	17,2%	

Chart 3 – Comparison between Burnout and quantitative variables of MOHQ Questionnaire

MOHQ	BURNOUT ABSENCE		RISK OF BURNOUT		MANN- WHITNEY U
	Mean	Mean rank 1	Mean	Mean rank 2	*p<,05
Age in years	39,7	74,2	44,5	95,9	1245*
Tot years of work	14,6	74,2	18,5	92,9	1298
Years in present administration	11,3	73,7	15,2	95,6	1226*
Time to reach work place	38,5	73,7	55,7	95,6	1227*
Avarage hours of work	7,1	78,5	6,8	75,7	1666
Average week hours of overtime	7,4	75	8,2	92,2	1344
NORMATIVE SCORES OF FOLLOWS ITEMS + > 2.9 - < 2.6					
Workplace comfort	2,5-	81,7	2,2-	60,5	1256*

Perception of managers	2,5-	79,3	2,5-	71,9	1563
Perception of colleagues	2,9+	80,8	2,8	65	1377
Perception of efficiency	2,7	80,2	2,6-	67,7	1450
Perception of org. equity	2,3-	80,8	2,2-	64,9	1375
Perception of conflict	2,4-	78,5	2,3-	75,8	1669
Perception of stress	2,9+	74,4	3,1+	95,3	1262*
Security	2,5-	80,7	2,2-	65,4	1387
Fatigue	3,1+	72,7	3,5+	103	1054**
Isolation	2,8	76,4	2,9+	85,6	1524
Openess to innovation	2,5-	80	2,3-	68,7	1476
Psychosomatic disorders	2,1-	73	2,5-	101,6	1090**
Positive indicators	2,8	82,3	2,6-	57, 8	1183**
Negative indicators	2,5-	78	2,4-	78,2	1724
Satisfaction	2,6-	79,4	2,6-	71,6	1556
TOTAL	39,3	78,4	40,4	76	1674

Relatively to the qualitative variables of MOHQ the subjects in burnout complain about worse comfort of the working environment, they have a greater perception of stress and fatigue and finally they show more psychosomatic disorders in comparison to the nurses that do not manifest burnout symptoms.

Instead, there are no significant differences in regards to the perception of managers, of colleagues, of efficiency and of organizational equity. There are not differences besides the perceptions of conflicts in work place, security, perception of isolation, opening to the innovation and the job satisfaction.

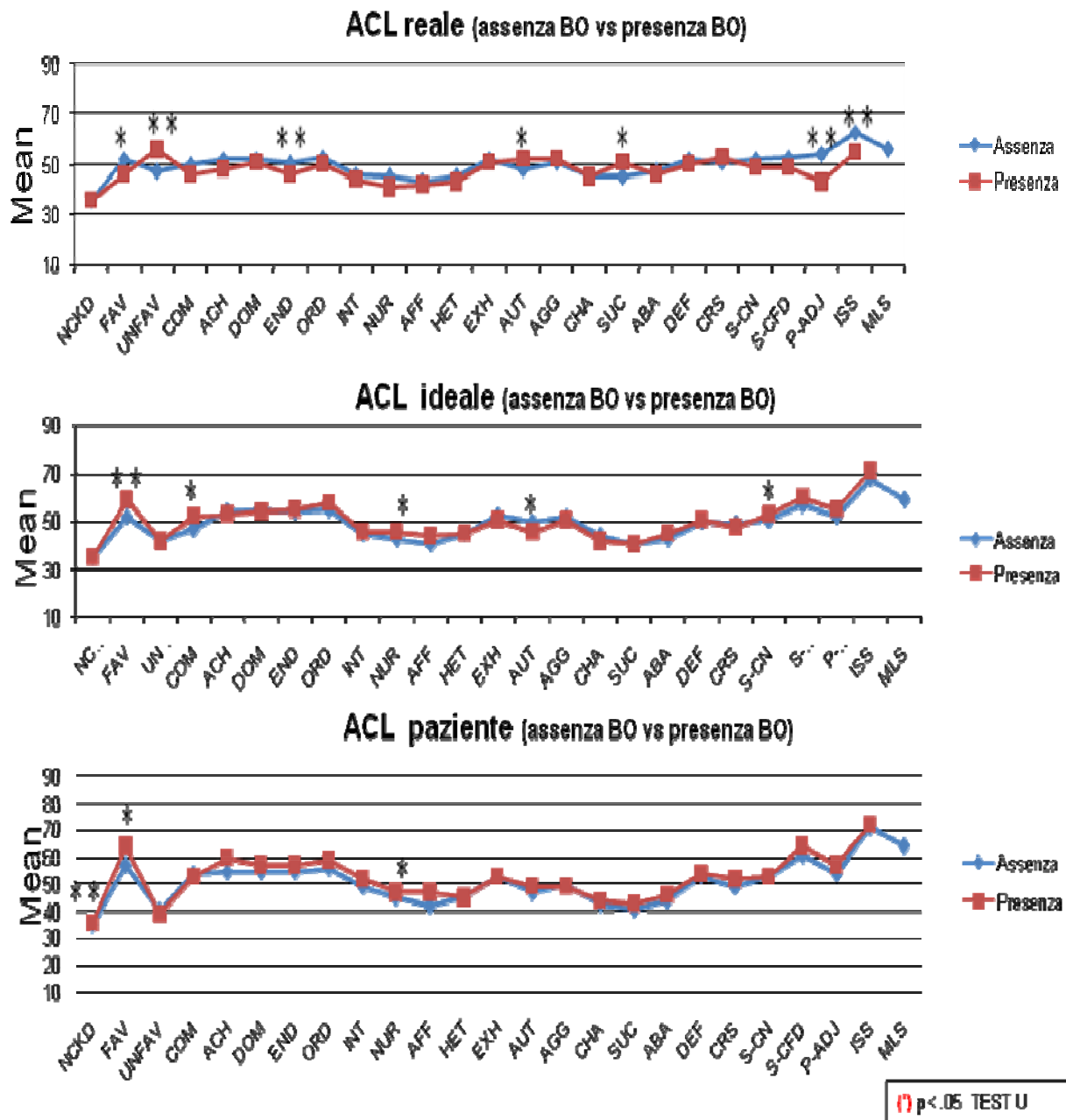
Relatively to the psychopathological and personality aspects (chart 4) there were no significant differences underlined even if the somatisation results to be the most represented indicator.

Chart 4 – Comparison between Burnout and SCL-90 Test

SCL-90	BURNOUT ABSENCE		BURNOUT PRESENCE		MANN- WHITNEY U
	MEAN	MEAN RANK 1	MEAN	MEAN RANK 2	
Cut off = 50					*p<,05 **p<,01
Somatization	51,7	75,6	54,3	89,4	1420
DOC	45,7	76,8	46,3	83,9	1568
Insensitivity in relationships	46,2	77,4	47,3	80,9	1651
Depression	43,5	76,6	44,7	84,9	1543
Anxiety	46,8	76,9	48,1	83,2	1588
Hostility	48,2	77,1	47,9	82,5	1608
Phobil anxiety	48,2	77,7	51,5	79,3	1694
Paranoid ideation	49,2	77,4	48,2	81,1	1646
Psychoticism	47,4	77,4	51,9	80,8	1652

For the real self ACL Test (figure 2), therefore as they are in reality, the subjects with risk of burnouts describe themselves with less fair (FAV) adjectives, and more unfavourable (UNFAV) adjectives, showing a self concept extending to the negative one in comparison to those people who don't manifest burnout; they have besides a smaller need to persevere in strive (END) , a great need of autonomy from the group (AUT), a great need to receive help or support (SUC), a smaller personal adaptation(P-ADJ), and finally a smaller respect of themselves (ISS).

Fig. 2 – Comparison between Burnout and three version of ACL Test



If we go to observe the differences present in the ideal self aspects measured through the ideal self ACL version (figure 2) can see that the subjects of the sample are more motivated to have a positive self-concept (FAV), a greater conformity (COM), a greater need to protect and help the others, a lower need of autonomy from the group (AUT), and finally a greater self-control (S-CN).

Relatively to the patient perception the significant differences are underlined in the ACL patient regarding the number of marked adjectives (NCKD) that is greater for the subjects in burnout, a greater self concept of (FAV) and a great need to protect and help the others (NUR); then the patient vision is not compromised.

In a second phase of data analysis the sample was divided according to the nurses professional employment areas: surgical, medical and pediatric order to highlight any possible differences among the nurses belonging to the different professional areas. The results of the MOHQ Test (chart 5) reveal greater dissatisfaction relatively to the job

environment comfort of the surgical and medical nurses, compared to the pediatric nurses who do not seem to identify this variable as a negative aspect of working environment; then were no significant differences between nurses of the three areas relatively to the perception of managers, with a more negative vision from the surgical and medical areas nurses in comparison to the pediatric nurses what seem to be satisfied of their relationship with the managers.

Chart 5 – Comparison between professional areas and MOHQ Questionnaire

MOHQ	CHIRURGY (N.50)		MEDICIN (N.55)		PEDIATRY (N.50)		Kruskal-Wallis test
	Mean	Mean Rank	Mean	Mean Rank	Mean	Mean Rank	*p<.05 **p<.01
Normative scores +>2,9 -<2,6							
Work place comfort	2,2-	65,1	2,3-	69	2,9+	101,2	20,5**
Perception of managers	2,3-	62,7	2,4-	72	2,8	99,7	19,2**
Perception of colleagues	2,8	65,3	2,8	74,4	3+	94,7	12,1**
Perception of efficiency	2,5-	61,4	2,6-	72,4	3+	100,8	21,2**
Perception of org. equity	2,1-	65,9	2,3-	76,6	2,5-	91,6	8,6*
Perception of conflict	2,4-	78,8	2,3-	73,9	2,5-	81,8	,880
Perception of stress	2,9+	75,6	2,9+	79,5	3+	78,8	,241
Security	2,2-	64	2,4-	72	2,8	98,6	16,9**
Fatigue	2,9+	59,8	3,3+	88,8	3,2+	84,3	13,1**
Isolation	2,6-	64,3	2,9+	83,1	2,9+	86,1	7,4*
Openness to innovation	2,4-	72,3	2,4-	76,4	2,5-	85,4	2,3
Psychosomatic disorders	2,4-	88,1	2,2-	79,7	2-	66	6,3*
Positive indicators	2,6-	63	2,7	75,1	2,9+	96,2	14,5**
Negative indicators	2,4-	77,2	2,5-	82,9	2,4-	73,4	1,2
Satisfaction	2,5-	67	2,6-	79	2,7	87,9	5,5

The perception of colleagues is seen positively in all three nursing areas with particular satisfaction in the pediatric nurses; the perception of efficiency is experienced negatively by both surgical and medical nurses, in comparison to the pediatric ones. The perception of organizational equity is negative particularly for all the surgical nurses; the job environment safety is dissatisfied for the surgical and medical nurses; the fatigue is experienced positively by all three nurse categories with particular evidence for those of surgical area. Finally the nurses of surgical area experienced negatively the isolation as an organizational aspect; it seems besides that all the nurse categories of the sample manifest psychosomatic disorders, especially those of the surgical area; finally the positive indicators seems to be smaller for the nurses of surgical area in comparison to the others two.

Were then examined differences in any possible psychopathological phenomena and personality variables in the subgroups using the Kruskal-Wallis Test (chart 6). Screening test SCL-90 relative to nurses in different areas are identified more symptoms representations in the surgical nurses with regard to: somatisation, obsessive compulsive disorder, numbness interpersonal relationships, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism.

Chart 6 – Comparison between professional areas and SCL-90 Test

SCL-90	CHIRURGY (n.50)		MEDICIN (n.55)		PEDIATRY (n.50)		KRUSKAL- WALLIS TEST
Cut off= 50	Mean	Mean Rank	Mean	Mean Rank	Mean	Mean Rank	*p<0.5 **p<0.1
Somatisation	60,7	105,4	50,7	76	45,2	53	34,6**
DOC	50,9	98,4	46,4	81,7	40	53,6	25,8**
Insensitivity in relationships	52,7	100,7	46,1	79,7	40,3	53,3	28**
Depression	51,1	102,5	43	79,3	37,3	52,1	31,9**
Anxiety	55,2	101,2	46,6	79,3	39,4	53,4	28,7**
Hostility	54	100	46,9	78,6	43,7	55,3	25,3**
Phobic Anxiety	53,2	96,9	49,1	80,2	44,2	56,7	22,7**
Paranoid ideation	54,7	97,1	48,4	78,9	44,1	57,9	19,3**
Psychoticism	55,3	100,4	47,2	78,8	42	54,7	27,1**

Discussion

The survey results showed that the 17% of nurses are in burnout without differences in the categories. However, a close relationship exists between the burnout, the years of employment and the distance from the work place in the examined nurses. In them there is a real loss of the ability to persevere in the assignment and to respect the professional duties. But to this is associated however a good critical self-awareness of these subjects: they judge themselves less favorably they would be better and are directed to ask help. Also they would like to go back to try a great need of interests and to protect the others, at the same time, to recover a good self-control and the sense of the discipline. To this is added that their vision of the patient, despite the burnout condition, has not deteriorated and they are not different from the "healthy" nurses.

The only one highlighted note in the difference among the various nurse categories, shows that the pediatric nurses express most positive general evaluations of the various aspects of the job condition, although it should be underlined that there is a difficulty that unite the three categories and that consists in the perception of the job organization that is unsatisfactory despite the efforts made to try to improve it.

Conclusions

The result of this study can be useful in raising awareness among the public and the employees, at all levels, about the serious present possibility that the nurses will develop the burnout, which can determine not only some implication in the working/ professional plan but also in the social relapses.

It may be noted in this connection that the nurse nowadays do not intervene only on the sick citizen but also and especially on the prevention of those still in reasonably good health and on the environment that surrounds them (family, job, etc.). It is necessary therefore to solicit the business organizations and the various institutions in order to draw up an interventions plan aimed to reduce risk factors and at the same time to provide support to those people who are already suffering from burnout and to their families with the purpose to make them easier and faster a gradual return in social and professional life.

References

1. Cherniss C. Professional burnout in human service organization, Praeger, New York, 1980.
2. Maslach C. La sindrome del burnout. Il prezzo dell'aiuto agli altri, Cittadella Editrice, Assisi, 1982.
3. Fassio O, Galati D. L'operatore in un contesto di emergenza: motivazioni ed emozioni. *Psicol Salute* 2002; 1: 13-26.
4. Del Rio G. Stress e lavoro nei servizi. Sintomi, cause e rimedi del burnout, La Nuova Italia Scientifica, Roma, 1990.
5. Maslach C, Leiter PL. Burnout e organizzazione. Modificare i fattori strutturali della demotivazione al lavoro, Erikson ed., Trento 2000, trad. it. di The truth about burnout. How organizations cause personal stress and what to do about it, Jossey Bass Inc., San Francisco 1997.
6. Tomei G, Cinti ME, Palitti T, et al. L'evidenza scientifica in medicina del lavoro: studio meta-analitico sulla sindrome del burnout. *Med. Lav* 2008; 99 (5): 327-351.
7. Jervis G. Psicologia dinamica, Il Mulino, Bologna, 2001.
8. Rogers C, Kniget M. Psicologia e relazioni umane, Bollati Boringhieri, Torino, 1970.
9. Di Nuovo S, Commodori E. Costi psicologici del curare. Stress e burnout nelle professioni di aiuto. Bonanno Editore, Roma, 2004.
10. Bettinardi O, Argentero P, Giorgi I. Indagine sullo stress occupazionale di operatori della medicina riabilitativa. *G Ital Med Lav Erg* 2007; 27: 29-33.
11. De Carlo NA (a cura di). Teorie & strumenti per lo psicologo del lavoro e delle organizzazioni: imprese e tecnologia, disagio, stress, burnout, mobbing. Franco Angeli, Milano, 2004.
12. Miller JG, Miller JL. A living system analysis of organizational pathology. *Behavioral Science* 1991; 36 (4): 239-251.
13. Nicholson N. Seven deadly syndromes of management and organization: the view from evolutionary psychology. *Manag Decis Econom* 1998; 19: 411-426.
14. Maslach C, Jackson SE, Leiter MP. Maslach Burnout Inventory Manual. 3rd ed. Consulting Psychologists Press, Palo Alto (CA), 1986.
15. Sirigatti S, Stefanile C. The Maslach Burnout Inventory: adattamento e taratura per l'Italia. OS Organizzazioni Speciali, Firenze, 1993.
16. Burla P, Cinti ME, Sygiel A, et al. Professional profiles in the healthcare field and factors associated with the development of burnout. *Prevent Res* 2012; 2 (2): 09-24.
17. Gough GH, Heilbrun BA, Fioravanti M. Manuale della versione italiana della Adjective checklist. OS Organizzazioni Speciali, Firenze, 1980.
18. Derogatis LR. Symptom Checklist 90-R: Administration, scoring, and procedures manual (3rd ed.). National Computer Systems, Minneapolis, 1994.
19. Avallone F, Paplomatas A. Salute organizzativa. Psicologia del benessere nei contesti lavorativi. Raffaello Cortina Editore, Milano, 2005.

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