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BURNOUT AND ITS COMPONENTS: A COMPARISON OF CRITICAL CARE UNIT NURSING AND WARD NURSING

IL BURNOUT E LE SUE COMPONENTI: CONFRONTO TRA INFERMIERI DI AREA CRITICA E INFERMIERI DI REPARTO

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Parole chiave: Burnout, nursing, area critica, Maslach

Abstract

Background: Burnout discomfort affects especially the health care workers so-called "helping professions", professions that require special skills and a strong propensity to human relation and empathy, in which take over, moreover, a high level of emotional burden.

The comparison to the base of this study concerns the nursing sphere, in particular the two large groups in which care is divided: general ward nurses and nurses working in the critical care unit.

Objectives: The aim of this study was to estimate the Burnout level with its components and work-related stress factors, in the critical care unit nurses; later on to compare the condition of the critical care unit nurses with that of general ward nurses (surgical, medical and paediatric areas), analyzed in a previous study.

Methods: The sample consisted of 100 case-nurses selected from DEA (Department of Emergency and Acceptance), resuscitation service, intensive care, 100 control- nurses selected from surgical, medical and paediatric wards, extracted from a total of 155 matched on the age, sex, total years of employment and work commitment.
The questionnaires were given to the two groups in order to assess the variables of the Burnout level, its components and work-related stress factors.

Results: The results showed that the percentage of presence of burnout in critical care nurses is 0%, while for colleagues in wards turns out to be 12%. The relevant data is shown by the results obtained from the MBI questionnaire: in fact, in equal proportion of personal accomplishment (PA), the critical unit nurses have a greater percentage of emotional exhaustion (EE) than these from ward, but the depersonalization component (DC) is much lower in the critical care unit nurses than in their ward colleagues. It is just that identification factor with the role and the patient seems to preserve this category from Burnout.

Discussion: The critical care unit nurses are apparently one of the hospital areas at highest risk of Burnout, as here are gathered many of precipitating factors such as work overload, organizational issues, ethical and emotional conflicts, exacerbated by the unpredictability of situations that must be daily worked out. In fact, we should not underestimate the key of personal satisfaction and role identification: these nurses feel gratified and despite the weight of responsibility, know they have back control and this makes them feel social outcasts.

Conclusions: The results of this study, which upsets all our expectations, has to make reflect the institutions: the latter should be concerned over the plan implementation to reduce the work-related stress factors, even to give right value to the professional figure of the nursery, for too long underestimated. We found, in fact, the findings from our study that it is the depersonalization the factor which bring health care workers to assume an hostility and cynicism attitude, erupting into a real disease.

Abstract

Introduzione: Il disagio per il Burnout colpisce particolarmente gli operatori delle cosiddette “helping professions”, professioni che richiedono particolari competenze ed una sicura propensione al rapporto umano ed empatico, in cui subentra, inoltre, anche una forte dose di carico emotivo.
Il confronto alla base di questo studio riguarda la sfera infermieristica, in particolare i due grandi gruppi in cui si divide l’assistenza: infermieri di degenza e infermieri operanti nel settore dell’area critica.

Obiettivi: L’obiettivo del presente studio è quello di stimare il livello di Burnout con le sue componenti e i fattori di stress lavoro correlato, negli infermieri di area critica; in un secondo momento confrontare la condizione degli infermieri dell’area critica rispetto a quella degli infermieri di reparto (area chirurgica, medica e pediatrica), analizzata in un precedente studio.

Metodi: Il campione è costituito da 100 casi-infermieri scelti tra DEA (Dipartimento di Emergenza ed Accettazione), rianimazione, terapia intensiva; 100 controlli-infermieri scelti tra i reparti chirurgici, medici e pediatrici, estratti da un totale di 155 per appaiamento rispetto all’età, al sesso, agli anni di lavoro totali e all’impegno lavorativo.

Ai due gruppi sono stati somministrati dei questionari volti a valutare le variabili sul livello del Burnout, sulle sue componenti e sui fattori di stress lavoro correlato.

Risultati: I risultati hanno messo in evidenza che la percentuale di presenza del Burnout negli infermieri di area critica è dello 0%, mentre per i colleghi di reparto risulta essere del 12%. Il dato rilevante è emerso dai risultati ottenuti dal questionario MBI: infatti, a parità di realizzazione personale (PP), gli infermieri dell'area critica hanno una percentuale di esaurimento emotivo (EE) maggiore rispetto ai colleghi di reparto; tuttavia, la componente di depersonalizzazione (DP) è nettamente inferiore negli infermieri di area critica rispetto ai colleghi di reparto. E' proprio questo fattore di identificazione con il ruolo e con il paziente che sembra preservare questa categoria dal Burnout.

Discussione: Gli infermieri di area critica rappresentano apparentemente uno dei settori ospedalieri a più alto rischio di Burnout, in quanto qui si concentrano molti dei fattori scatenanti quali il sovraccarico di lavoro, i problemi organizzativi, i conflitti etici ed emotivi, aggravati dall'imprevedibilità delle situazioni che devono essere affrontate quotidianamente. In realtà, non bisogna sottovalutare la chiave della soddisfazione personale e dell'identificazione con il proprio ruolo: questi infermieri si sentono gratificati e nonostante il peso della responsabilità, sanno di avere in mano il controllo e ciò non li fa sentire degli emarginati sociali.

Conclusioni: Il risultato di questo studio, che stravolge tutte le nostre aspettative, deve far riflettere le istituzioni: quest'ultime dovrebbero occuparsi oltre della messa in atto di un piano finalizzato a ridurre i fattori di stress lavoro correlato, anche di dare il giusto valore professionale alla figura dell'infermiere, da troppo tempo sottovalutata. Abbiamo constatato, infatti, dai dati emersi dal nostro studio che è proprio il fattore di depersonalizzazione a portare l'operatore sanitario ad assumere un atteggiamento di ostilità e cinismo, fino a sfociare in vera e propria malattia.

Background

Professionals working in health and social services and educational institutions for the role played spend a considerable amount of time in intense involvement with other people. The interaction between operator and user is often focused on current problems of the latter (psychological problems, social or physical) and is, therefore, often felt burdened by anxiety, embarrassment, fear or despair (1). This is why, although the phenomenon of stress and burnout is spreading in a variety of organizational contexts. Occupations at higher risk are those that offer education, support and care to people in need, for the multitude of factors and emotional resources used by the operators.

According to Maslach and Leiter (2), these professions are high-touched (continuous touch), which implies direct contacts and a long period of time with distress people which required immediate assistance. An important reason that causes these professionals to burnout experience is the contradiction runs within the system in which they work: on the one hand feel the need to implement interventions context-specific to meet the patient's needs, because each is bearer of different stories and different needs. Secondly, the organization requires, as claimed by Del Leo (3), an uncritical adaptation to the bureaucratic routine, with no creativity, and this leads very often to deliver standardized services that cannot reach out effectively to the several user demands. This means that operators feel limited by strict organizational impositions and this prevents the implementation from being creative and spontaneous.

Nurses, in particular, are steadily submitted to urgent requests by both, users, who see their professional role as the primary reference point on the assistance path, and by organizations that require more work in less time, with less resources and with more people to control. This increases the risk that the workload may jeopardize the effectiveness of that aid activities, causing constant complaints arising by unsatisfied users. *"The art of nursing is putted into practice for the disabled person helping them to work alone or helping them to learn how to do it alone "*(4), the nurse, in fact, as confirmed by Orem's nursing theory, follows the users since reception till resignation in a continuous "self - care"

process. The nurse tries to meet the patient's needs by replying to the three types of problems: "replacement", when there is lack of activity performance, that is when you are close to total dependence; "integration", when there is lack of progress and the user is in an intermediate position between autonomy and independence; "information and education", when there is an unsuitability due to a lack of knowledge, but the person is close to autonomy (5). Meeting the user's needs drove, however, nurse to forget, or rather to unawares neglect of their in-depth needs and motivations. This attitude is gradually transformed into a sense of helplessness, discomfort, which makes service operator, previously plunged in a picture of health, goodness and power, a victim of pain, discomfort and user's need. (6) The inability to help facilitates the onset of doubt about the their skills. Service operator, who set off from a strong profession idealization, experiences frustration first and then burnout. In practical daily life personal skills play an important role as much as technical and professional capacity. Skills or abilities stands for empathy, ability to adapt to the different situations, self-control, initiative and self-confidence, workload management and the ability to build creative and efficient relationships (7). This is what Goleman called "emotional intelligence" (8) precisely is the people ability to deal effectively and optimally with the life challenges.

It is important to underline that the causes of burnout should not be searched in the individual but in the "conduct of a person in the workplace can be understood solely when analyzed within the social context of that workplace" (2). This involves a multidimensional integration, that is, an interaction between organizational and personality variables in determining the right conditions for burnout to manifest and develop, without forgetting that it has been defined as an organizational disease.

The picture of nursery, especially in Italy, it is very often associated with a caregiver or nurse: in fact, despite the great evolution that has characterized this profession, you have to consider that it is not sufficient to gratify these professionals who live in continuous contact with the sufferance and difficulties. This is another key aspect of the burnout: the gratification and satisfaction in the workplace.

Prevention, therefore, is the necessary, and this means avoidance of the phenomenon spread, as stated also by Cherniss (9), it is highly contagious among people who interact in the working environment. It also means avoiding all the conditions that hinder the operator's professionalism and cause damage to organization as well as to service operator, and to users whom intended the service.

Objectives

The primary objective of our survey was to compare the two broad categories of nursing wards: hospitalization area (medical, surgical and paediatric), analyzed in a previous study by some of the authors (10) that had shown that 17% of the sample through the MBI was in burnout, and critical care unit (medical, surgical and paediatric), considered by our study. In the first place, we estimated the level of Burnout and its components in critical care nurses unit and any work-related stress factors associated with Burnout. Subsequently we passed to the comparison between two categories, by analyzing own of the three dimensions of burnout and the work-related stress factors.

Materials and Methods

The sample consisted of 100 case-nurses from the critical unit, 44 males and 56 females, mean age is 36.17 (SD 8.00); selected from DEA (Department of Emergency and Acceptance), resuscitation and intensive care.

100 control-ward nurses: 38 males and 62 females, mean age is 35.59 (SD 8.34), extracted from a total of 155 nurses pairing for age, sex, length of service and total work commitment (see chart 1).

From the results obtained from the pairing verification by a comparison between means there are no significant differences in age, sex and work commitment: in particular, the nurses of both two areas examined in our study do not differ by age, for the amount of daily work and time to reach workplace.

Chart 1 - *Matching verification on age, gender, length of service, and work commitment.*

		CRITICAL UNIT		WARD		t
		Std. Deviation	Mean	Mean	Std. Deviation	*P<.05 **P<01
	AGE	8,1	36,2	35,6	8,3	0,6
WORK	Total years of employment	6,9	10,3	9,4	6,7	0,3
	Years in present administration	5,1	6,6	6,9	5,1	0,7
	Average working hours die	7,1	6,6	7,5	7,2	0,4
	Average overtime working hours per week	0,7	7,15	7,1	3,2	0,9
	Time to reach workplace	22,6	37,9	41,5	28,9	0,3
SEX		**CRITICAL UNIT**		**WARD**		**X2 *P<0.5**
	Male	22%		19%		0,722
	Female	28%		31%		

Both samples are used in hospital wards in Policlinico Umberto I Company in Rome.

The data collection period was between September and December 2011.

The subjects included in this study chose to participate voluntarily in the survey, protected by anonymity.

For the variables of interest were used the corresponding assessment tools for both case-nurses and case –control nurses:

• Level of Burnout: MBI (Maslach Burnout Inventory)

• Organizational Health Analysis: MOHQ (Multidimensional Organizational Health Questionnaire)

The Maslach Burnout Inventory (MBI) is represented by a questionnaire to identify three subscales: Emotional Exhaustion (EE), Depersonalization (DP) and Personal Accomplishment, (PA).

The Emotional Exhaustion (Emotional Exhaustion, EE) is the stage in which it seemed to be the gap between environmental demands and individual resources that creates a state of chronic stress fuelled by constant contact with people. It is characterized, in fact, by lack of energy to cope with everyday life: the person feels drained, exhausted, his emotional resources are just "exhausted."

The term depersonalization (DP) refers to an attitude of detachment and hostility primarily involving helping-relation lived with discomfort, coldness, cynicism. As a result, the operator attempts to escape involvement by limiting amount and quality of its professional interventions, to the point of slippery answering to the help requests, and to underestimate or deny the patient's problems.

Decreased Personal Accomplishment (PA) refers to the professional failure feelings associated with the work inadequacy perception 11.

The MBI questionnaire consists of 22 items that measure the three identified subscales: the frequency with which the respondent proof feelings for each subscale is assayed using a response mode to six points, the details of which are set to "never" and "every day. "The answers to the questions are expressed in numbers according to a Likert's scale, the sum of which provides a measurement of the burnout intensity in the three subscales. Low scores show low levels of burnout and vice versa, in the EE and DP subscales; while in the PA evaluation is reversed: low scores indicate high

levels of burnout (12). The latter is designed in the questionnaire as a continuous variable and as a dichotomous variable, which can only be present or absent.

The multidimensional questionnaire on organizational health (MOHQ) allows the examination of all processes and organizational practices affecting welfare of the working community. In this concept the focus is on the organization, its processes and its relations. The questionnaire appears only a scale, related to the personal health, that of psychosomatic disorders, while all other indicators refer to the consequences, positive and negative, on the relationship between person and organization (13). The questionnaire consists of eight parts: demographic data, work environment features, safety, job characteristics, the positive and negative organizational well-being indicators, openness to innovations, suggestions. The results will help identify potential problems and areas needed improvement to be considered in designing a working environment close to the people well-being.

The results were subjected to statistical analysis using Chi-square test and the Mann-Whitney U using the software SPSS ver 17.0.

Results

The MBI, Maslach Burnout Inventory, highlighted that 0% of subjects from the critical area sample proves to be in burnout, unlike with the wards sample which turns out to be 12% of the examined subjects (Chart 2).

Chart 2 - *Professional categories frequencies in the Burnout classes (MBI).*

BURNOUT			
MBI	**BURNOUTABSENCE**	**BURNOUT PRESENCE**	**X^2**
CRITICAL UNIT n.100	100%	**0%**	20,68**
WARD n.100	88%	**12%**	* = p<0.5 ** = p<0.1

With regard to the three components of burnout, Emotional Exhaustion, Depersonalization and Personal Accomplishment, identified by the MBI test, there is no difference of statistical significance for the means of personal accomplishment, in fact the percentage of PA was 19% for nurses of critical unit and 16.5% for ward nurses (Fig.1). Two important factors were the emotional exhaustion and depersonalization: EE in the emergency/critical category is much higher than in the ward category, for instance, the first gives a rate of 27.5% and the second of 18% (Fig. 2), the DP, however, turns out to be completely absent in the critical unit at the expense of the ward categories where we have a 13% of depersonalization (Fig. 3 and Table 3).

Chart 3 - *Average values of the MBI subscales in professional categories*

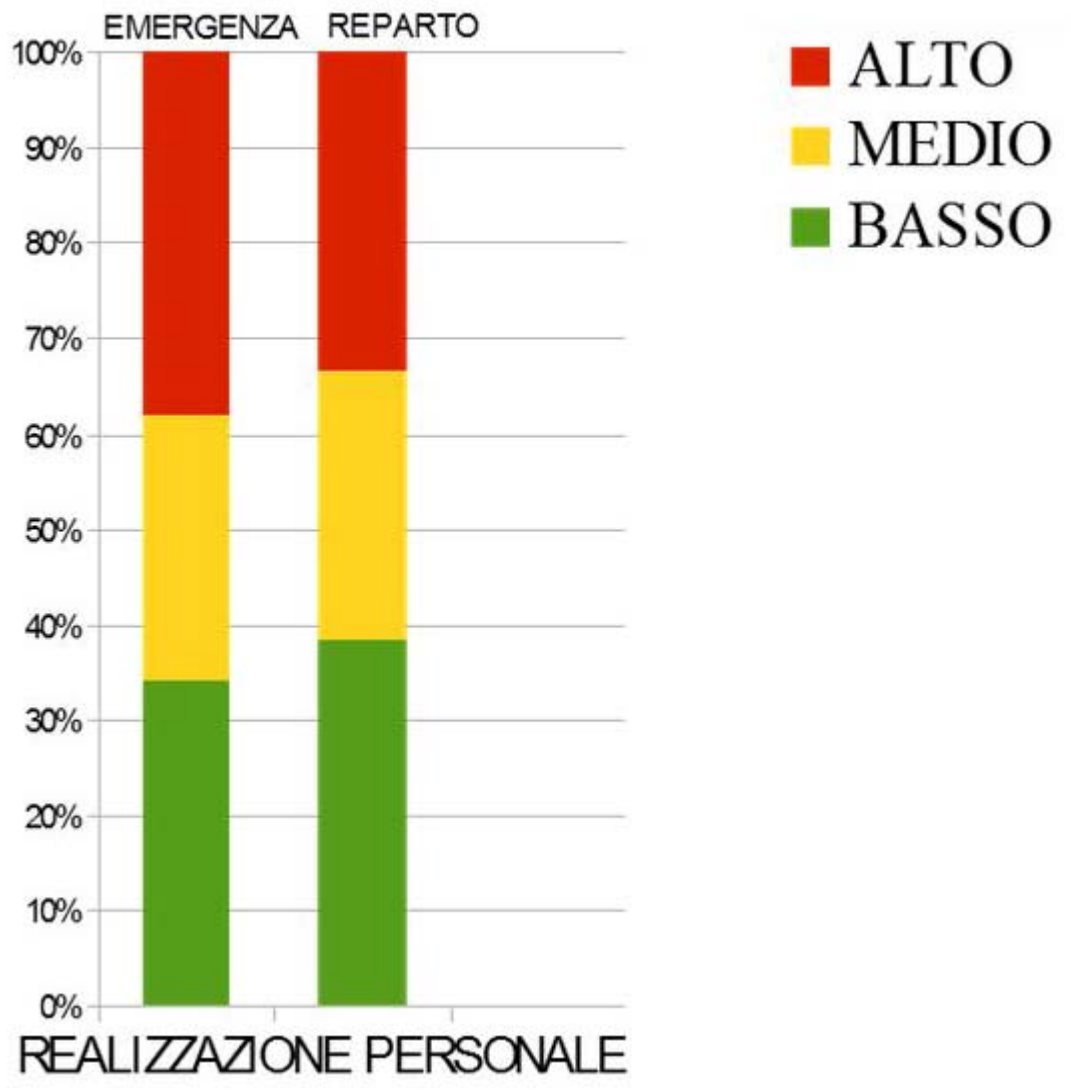
		CRITICAL UNIT	WARD	X^2
EMOTIONAL EXHAUSTION	**HIGH**	**27,50%**	**18,00%**	7,408*
	AWERAGE	8,50%	11,00%	
	LOW	14,00%	21,00%	
PERSONAL ACCOMPLISHMENT	**HIGH**	19,00%	16,50%	0,592
	AWERAGE	14,00%	14,10%	
	LOW	17,00%	19,00%	
DEPERSONALISATION	**HIGH**	**0,00%**	**13,00%**	81,690**
	AWERAGE	0,00%	16%	*= p<.05 **= p<.01
	LOW	50,00%	21%	

Figure 1 - *Comparison between the professional categories and PA component*

EMERGENCY

WARD

Personal Accomplishment **HIGH AWERAGE LOW**

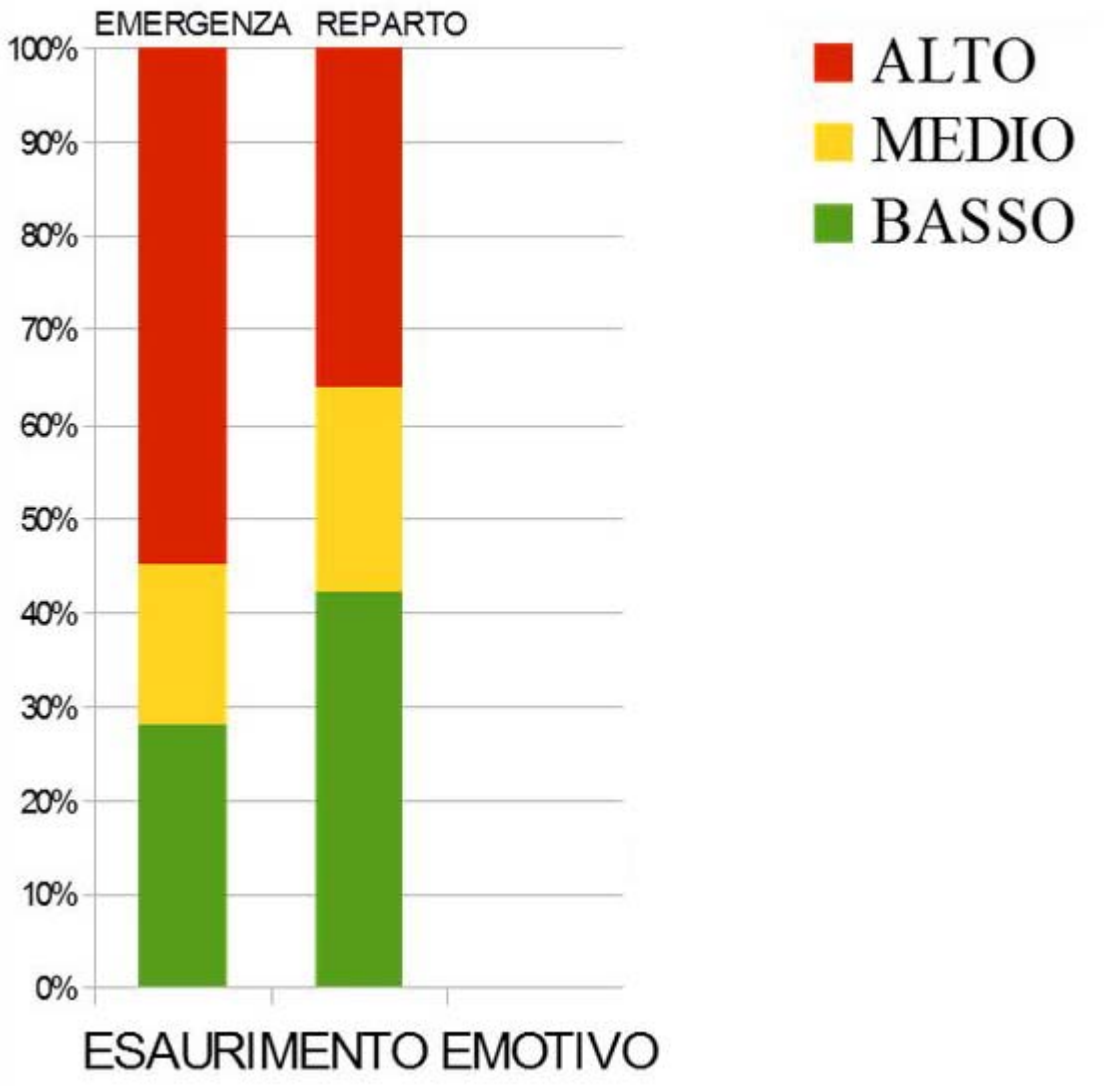


Personal Accomplishment

Figure 2 - *Comparison between the professional categories and EE component*

EMERGENCY or WARD CRITICAL UNIT

HIGH AWERAGE LOW



Emotional Exhaustion

Figure 3 – *Comparison between professional categories and DP component*

EMERGENCY or CRITICAL UNIT
WARD

HIGH AWERAGE LOW

Depersonalisation

The data obtained for the work-related stress factors are validated what has been said before about three components of burnout: in fact, with regard to MOHQ's qualitative variables, the critical unit sample has a more negative perception of managers, stress and fatigue than the ward sample. The mean score for the perception of managers of 2.3, for critical unit , 2.6 for the ward sample. The average score for the second variable is 3.2 for critical unit and 2.9 for ward sample.

The rate of the critical unit sample is higher not only in the ward sample rate, but also higher than the normal range established by the questionnaire. The fatigue score rate in critical unit sample is 3.4 and 3.1 in ward sample.

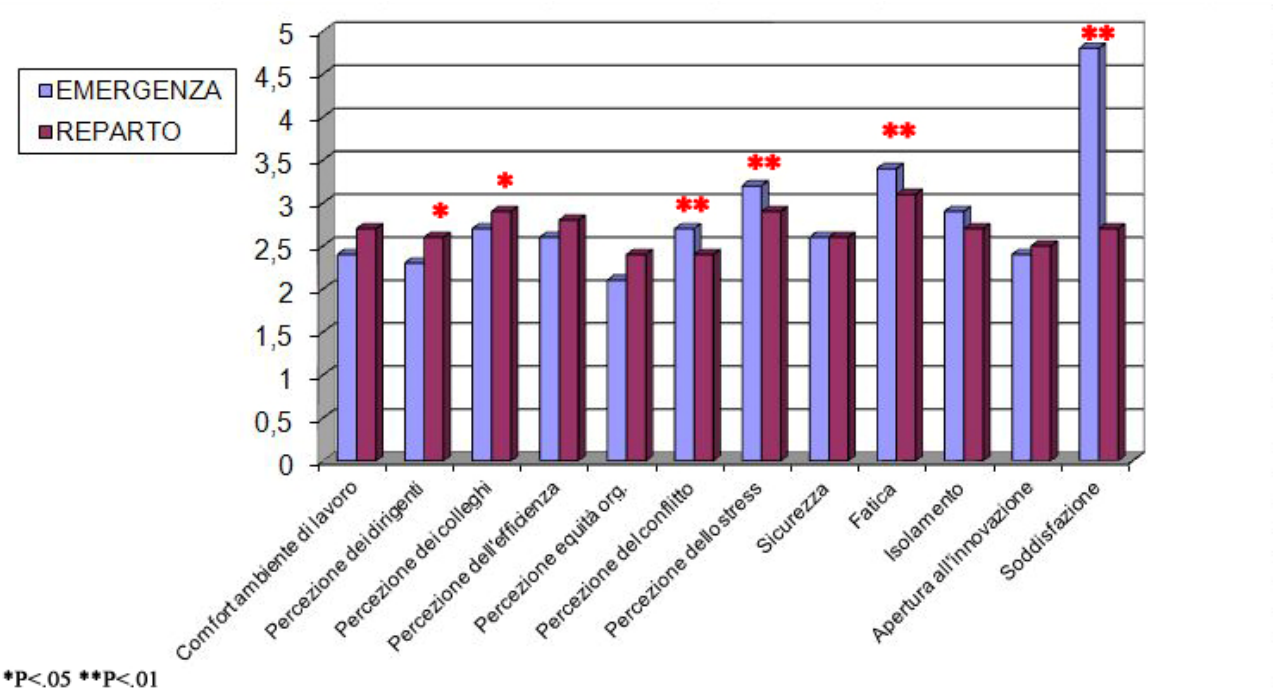
There is a negative perception of conflict and colleagues compared to the ward group, however, remains within the normal range. The variable satisfaction turns out to be positive for both samples examined. However, in the critical unit nurses is much higher not only than in those from ward but also compared to the normal range established by questionnaire MOHQ: the satisfaction score is 4.8 in critical unit and 2.7 in ward area.

No significant differences instead for the working environment comfort (2.4 for critical unit, 2.7 for ward), the perception of efficiency (2.6 critical unit, 2.8 ward), the perception of organizational fairness (2.1 critical unit, 2.4 ward), safety (2.6 for both samples examined), isolation (2.9 critical unit, 2.7 ward) and openness to innovations (2.4 critical unit, 2.5 ward). (Chart 4).

Chart 4 - *Comparison between professional categories and MOHQ's quantitative variables*

MOHQ ORGANISATIONAL HEALTH	**CRITICAL UNIT**		**WARD**		**t**
	Mean	Std.Deviation	Mean	Std.Deviation	*P<.05 **P<.01
Workplace comfort	2,4-	0,8	2,7-	0,7	0,1
Perception of managers	**2,3-**	0,8	**2,6-**	0,6	**0,0***
Perception of colleagues	**2,7**	0,7	**2,9**	0,4	**0,0***
Perception of efficiency	2,6-	0,7	2,8	0,4	0,1
Perception of org. equity	2,1-	0,7	2,4-	0,6	0
Perception of conflict	**2,7**	0,7	**2,4-**	0,6	**0,0****
Perception of stress	**3,2+**	0,7	**2,9**	0,7	**0,0****
Security	2,6	2,2	2,6-	0,8	0,8
Fatigue	**3,4+**	0,6	**3,1+**	0,5	**0,0****
Isolation	2,9	0,6	2,7	0,6	0,1
Openness to innovation	2,4	0,8	2,5-	0,6	0,4
Satisfaction	**4,8+**	1,1	**2,7**	0,6	**0,0****
MOHQ NORMATIVE SCORES + >2,9 < -2,6					

Figure 4 - *Comparison between professional groups and MOHQ's quantitative variables*



*P<.05 **P<.01

EMERGENCY
WARD

Workplace comfort
Perception of managers
Perception of colleagues
Perception of efficiency
Perception of org. equity
Perception of conflict
Perception of stress
Security
Fatigue
Isolation
Openness to innovation
Satisfaction

Discussion

The results that have emerged conducting this survey made it possible to make observations on the burnout difference among two examined categories of nurses: 0% of the critical unit nurses and 12% if ward nurses. Looking at the three MBI questionnaire subscales it has come to the conclusion that in equal rates of Personal Accomplishment, critical unit nurses have a higher percentage of Emotional Exhaustion than those from ward, but the role identification factor and in turn, user identification, as evidenced by the absence of depersonalization, seems to protect them from burnout. Critical unit nurses, despite the amount of commitment and daily pressure due to the impossibility to foresee the multitude of clinical cases that can arise, feel fully satisfied with their work, as evidenced by the mean value of satisfaction in MOHQ questionnaire. Motivation is the key that allows them to attribute failures to uncontrollable circumstances without interpreting them as real personal bankruptcies. What most reward them are: the creative challenge, the opportunity to demonstrate their skills and professional experience on the field and feel integral part of a team and not just mere executors of what was decided by others (14). Ward nurses, however, fall into the monotony oblivion and custom, do not feel gratified and encouraged to seek out and implement new welfare schemes and therefore have a much higher percentage burnout of than their colleagues in the critical unit.

Conclusions

This study has allowed us to examine how important it feel accomplished in their work, in all disciplines, but especially in those where there is a helping relationship health worker - user. The institutions should deal with the plans implementation aimed not only at enhancing the work-related stress factors, but also to give the right value to this professional figure, a figure constantly bombarded by users requests and bureaucratic sphere. During the course of the centuries have been implemented numerous measures to improve this type of discipline but evidently still not enough has been done: it is thanks to studies like this that we should reflect and contribute effectively to ensure that nurses, like any other health care , can face with equanimity the care ongoing challenge, both for their own mental well-being and for the optimal success of nursing interventions undergone by the user.

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