

Articolo di ricerca

Staff Burnout decreases Health Services Efficacy and Effectiveness as well as Patient SatisfactionDI IORIO BR¹, BELLIZZI V¹, CUCCINIELLO E¹, BROGNA A², VISCONTI L³, PASCARELLA ML⁴, LANDOLFI R⁵.¹ ASL AV2, P.O. di Solofra, S.O.C. di Nefrologia, ² ASL AV2, P.O. di Solofra, Direttore Sanitario, ³ ASL AV2, S.O.C. di Verifica e Qualità, ⁴ ASL AV2, Direttore Sanitario, ⁵ ASL AV2, Direttore Generale**Abstract****Rationale.** Although there has been increasing interest in assessing patient satisfaction with health care during the past year, relatively few studies investigated patient satisfaction and burnout and health care assessment.**Methods.** Observational study of the relationship between burnout and work satisfaction in physician and nurses and patient satisfaction. 191 health care workers and 1'234 patients are investigated. Staff burnout was assessed using the Maslach Burnout Inventory. Three staff burnout subscales were developed by using factor analysis: Emotional Exhaustion, Depersonalization, and Personal Accomplishment.**Outcomes.** Patient satisfaction was assessed by means of a multi-choice questionnaire that incorporated completeness of medical information, and emotional relationship with health care staff, and staff performance, and organizational aspects of health care service.**Results.** Burnout is presented in 35% of Surgery, 20% of Internal Medicine, 10% of Dialysis, 33% of Intensive Care Unit, and 30% Orthopaedic Unit. Analysis of patient satisfaction assessments showed general appreciation for the "courtesy" and "kindness" of staff, but showed evidence of problems regarding organizational aspects and structural factors. However, the most critical dimension was for "information". There was a significant positive correlation between staff personal accomplishment and client satisfaction ($P<0.01$); and between staff emotional exhaustion and patient satisfaction ($P<0.01$).**Conclusions.** High levels of burnout in physicians and nurses are associated with poor patient satisfaction and poor efficacy and effectiveness of health care services. Identifying and preventing staff burnout may increase patient satisfaction and ameliorate effectiveness of health care unities.**Keywords** Burnout, Patient Satisfaction, Quality of Health Care, Care Effectiveness, Care Efficacy**RATIONALE**

The growth rate for the number of end-stage renal disease (ESRD) patients is 5 times that of the world population, and it is expected that the number of ESRD patients being treated will increase from ~2 million in ~2005 to 2.5 million by 2010 worldwide [1]. The ESRD patients are generally more depressed and less satisfied than their peers in the general population [2]. Worldwide, the straight answer must be a better life with freedom from poverty, hunger, and violence, and with the ability to read, work, and choose how many children to have. As for health, there is still much to do to prevent chronic disease, through improving maternal and infant health, tackling infections, treating depression, cutting rates of smoking, and improving diet and levels of physical activity. These are big themes needing concerted responses [3].

On the other hand, over the years, patient satisfaction has become an increasingly important indicator for evaluating health care quality and is now an integral part of schemes for monitoring and improving health care [4-6]. Many studies dealing with patient satisfaction with health care services attempted to identify dimensions that contribute to determine satisfaction in relation to these services and the relationships between them, with reference to certain client characteristics [7-9]. During the past years, interest in burnout increased because we started to understand the significant negative impact that it has on employees, service consumers, and organizations. The high risk for professional burnout, job-related stress and job dissatisfaction noted among nurses and physicians has led

a growing interest [10]. Burnout is a prolonged response to chronic emotional and interpersonal stressors on the job, and is defined by the three dimensions of exhaustion, cynicism, and inefficacy. The past 25 years of research has established the complexity of the construct, and places the individual stress experience within a larger organizational context of people's relation to their work. Recently, the work on burnout has expanded internationally and has led to new conceptual models. The focus on engagement, the positive antithesis of burnout, promises to yield new perspectives on interventions to alleviate burnout. The social focus of burnout, the solid research basis concerning the syndrome, and its specific ties to the work domain make a distinct and valuable contribution to people's health and well-being [11].

In Italy, few measurement instruments with known psychometric properties aimed at evaluating the satisfaction of hemodialysed patients were reported in the literature to date. For this reason, we decided to develop a specific measure for hemodialysed patients [12-14]. It is also clear from the literature that although many studies were interested in patient's assessment of their health care, little attention was given to the effects of stress levels in health care staff on patient satisfaction with their services. In particular, only a few studies analyzed the relationship between patient satisfaction and health care staff burnout [15-17].

In particular, the dialysis nurse-patient relationship is much more intense than in other hospital wards, and a deeper bond is established because patients regard the staff and the actual

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dialysis facility itself as a source of safety, to which their possibility of survival is linked. Dialysis therapy determines a sequence of therapeutic actions that over time become like rituals, involving patients, physicians, and nurses in different ways. Physicians and nurses usually develop a deep emotional relationship with the patients. In particular, nurses often have to provide emotional support to patients. Physicians are somewhat less emotionally involved because they spend less time in the health care unit because of their work timetable, shifts, and duties [18-20].

Recently, Argentero [21] showed that high levels of burnout in physician and nurses, working in dialysis, are associated with poor patients satisfaction in dialysis units, and identifying and preventing staff burnout may increase patient satisfaction with health care.

We performed this study to achieve these goals:

1. identify and compare burnout levels in physicians and nurses working in hospitals health services,
2. identify and compare levels of satisfaction in several health care services,
3. analyze the relationship between burnout in health care staff (physicians and nurses) and patient satisfaction.

METHODS

This research was an observational, cross-sectional, and comparative study.

The 3 steps of the study were as follows:

step 1 - nurses (N) and physicians (Ph) burnout: we analyzed the burnout levels in workers of five hospital services;

step 2 - efficacy and effectiveness of health services: we analyzed the efficacy and effectiveness of these hospital services; and analyzed worker decisions about health care location and worker instrument quality;

step 3 - patient satisfaction: we analyzed the satisfaction in patients of these hospital services.

Research Design

We studied the nurses-physician burnout in 5 care services (surgery -S-, internal medicine -IM-, dialysis -D-, orthopaedic unit -OU-, and intensive care unit -ICU-).

The population consisted in 106 nurses (40 in S; 31 in IM; 15 in D, 26 in OU, and 21 in ICU) and 43 physicians (15 in S; 10 in IM; 4 in D, 6 in OU, and 8 in ICU) working in Southern of Italy. The research was conducted between January and December 2004.

In the same period, 1'234 patients (355 in S; 350 in IM; 222 in D, 246 in OU, and 61 in ICU) participated to satisfaction analysis.

All participants in the study (physicians, nurses, and patients) filled in the relevant informed consent form before enrolment.

Step 1: Staff Survey

The health care staff involved in this study are distributed as listed in Table 1 and Table 2.

Health care staff burnout was measured using the Maslach Burnout Inventory (MBI) [22]. Burnout is a syndrome encompassing 3 domains: Emotional Exhaustion, Depersonalization, and sense of low Personal Accomplishment that is associated with decreased work performance. The MBI is a 22-item questionnaire, reproducible and previously validated and generally considered a standard measure for burnout [23].

On the basis of MBI answers, independent subscale scores are calculated for each of the 3 dimensions of burnout. High scores for Emotional Exhaustion and Depersonalization factors indicate high burnout levels, whereas high Personal Accomplishment scores correspond to a low level of burnout. Total scores for each of the 3 burnout dimensions were obtained from the sum of scores for each item on the relative subscale.

Italian normal mean scores for the 3 burnout dimensions for health workers are 19.47 ± 11.33 (SD), 5.34 ± 5.44 , and 33.99 ± 8.28 for the Emotional Exhaustion, Depersonalization, and Personal Accomplishment subscales, respectively [24].

Table 1 - Characteristics of Healthcare workers and patients. Data are expressed as mean \pm SD

	Doctors	Nurses	p
Number	58	133	
Male (%)	44	86	0.001
Age, years	50 \pm 11	37 \pm 12	0.001
Employed age, years	10.22 \pm 6.62	6.18 \pm 4.04	0.001
Marital status (%)	single	37	NS
	married	43	0.006
	divorced	12	NS
	widowed	8	0.001
Children	1.8 \pm 6.8	1.6 \pm 1.1	NS
Emotional exhaustion	17.8 \pm 1.4	18.2 \pm 7.1	NS
Depersonalization	5.8 \pm 3.4	6.1 \pm 4.3	NS
Personal accomplishment	35.6 \pm 8.7	35.1 \pm 9.2	NS

Table 2 - Characteristics of Healthcare workers of single professional care. Data expressed as mean \pm SD (Median score)

	S	IM	D	ICU	OU	p
Number	55	41	19	32	29	
Age, years	51.7 \pm 19.7 (47.8)	46.5 \pm 8.6 *	43.3 \pm 9.8 *	44.3 \pm 7.7 *	45.2 \pm 8.8 *	0.001
Employed age, years	20.3 \pm 11.9 (20)	17.7 \pm 8.6	14.3 \pm 3.5 * §	16.6 \pm 8.5 *	15.3 \pm 8.3 *	0.001
Burnout (%)	35.1	20°	10.4° §	33.4	30.1	0.001

* p<0.05 vs S, § p<0.05 vs IM, ° p<0.05 vs S, ICU, OU

Table 3 - Characteristics of patients. Data are expressed as mean \pm SD

	IM	S	D	OU	ICU	p
Number	462	270	116	232	154	
Male (%)	44	86	66	58	62	
Age, years	50 \pm 11 *	47 \pm 12 *	57 \pm 16	45 \pm 24 *	37 \pm 19 * §	0.001
Marital status (%) single	13	11	10	10	24	0.006
married	69	73	70	72	65	NS
divorced	14	8	13	12	11	NS
widowed	4	8	7	6	0	0.005
Children	2.2 \pm 1.1	1.7 \pm 0.9 §	1.9 \pm 1.6	1.4 \pm 1.4 §	1.3 \pm 1.9 §	0.001

* p<0.05 vs D, § p<0.05 vs S

Step 2: Efficacy and Effectiveness of Care

We performed the Best Practice Analysis. This analysis is determined by recognition of "best in class"

Differences between centres were evaluated by flow charts applying the Barber nomogram. This is a graphic analysis allowing time related comparisons, both within the same service or between different centres, by mean of a confidence area capable to evaluate specific markers. Specifically, Barber's nomogram is built on a Cartesian axis system where the abscissa indicates the turnover rate value and the ordinate represents the mean hospitalization value; the resulting area is further divided according to either the beds occupation mean index and the beds rotation mean index.

Analysis dimension were: effectiveness and efficacy. The centre which balanced at best both effectiveness and efficacy was the "best in class". To discover this one, it was taken into account the centre ranking related to performance markers. Specifically:

- Effectiveness: the "best practice" is represented by the unit with the lower incidence of usual hospitalization at risk of uneffectiveness or, conversely, with the higher incidence of usual hospitalization with risks of uneffectiveness. The ranking is utilized as for a criteria to collocate the units on the effectiveness axis.
- Efficacy: since effectiveness comprises more markers, to identify the "best practice" it was utilized the mean unit ranking related to all the efficacy markers. Then, by mean of balance

system evaluating each position, it was determined a number comprehensive of the efficacy of each unit. According to such a synthetic value, the ranking was utilized to collocate the units on the efficacy axis.

In addition, an Environmental and Work Instrument Quality (SEVIQ) questionnaire, already conduct in 71 Italian dialysis centres, and already verified by the Italian Society of VRQ [12,13], subdivided in 6 basic sections, was given to the subjects participating to study.

The questionnaire is organized as follow:

1. personal data
2. location (7 items)
3. instruments (6 items)
4. environment (6 items)
5. objectives (4 items)
6. quality (5 items)
7. justifications (6 items).

The compilation of the questionnaire respected the entire anonymity to avoid every shape of conditioning and to agree the participants of to answer on the base of the their convictions. ten-point rating scale (1 indicates not at all satisfied, and 10, very satisfied) was used.

Step 3: Patient Survey

The study comprised 1234 patients who had been admitted to hospitals (tab. 3). The questionnaire contained 33 numbered que-

Table 4 - Characteristics of Quality Satisfaction and Performance model in the patients. Data are expressed as mean \pm SD (Median score)

	S	IM	D	ICU	OU	p
Quality and completeness of information received	2.7 \pm 9.7 * (2.8)	3.5 \pm 8.6 * (3.6)	6.4 \pm 2.7 (6.5)	2.3 \pm 1.7 * (2.4)	4.2 \pm 3.8 (4.3)	0.001
Quality of the worker-client relationship	1.9 \pm 1.7 * (2.1)	3.4 \pm 1.6 * (3.6)	8.7 \pm 1.7 (8.6)	2.4 \pm 2.1 * (2.7)	3.2 \pm 1.8 * (3.2)	0.001
Quality of treatment	2.3 \pm 1.9 * (2.0)	1.7 \pm 1.8 * (1.6)	7.7 \pm 2.7 * (7.6)	1.6 \pm 2.3 * (1.9)	5.3 \pm 2.3 (5.2)	0.001
Quality of service organization	4.7 \pm 3.7 (4.8)	2.5 \pm 1.6 * (2.6)	6.7 \pm 3.4 (6.6)	1.9 \pm 1.7 * (2.0)	3.2 \pm 2.6 * (3.2)	0.001

* p<0.05 vs D

stions, 21 of which directly concerned quality of care and patient's satisfaction [25]. The questionnaire was designed for adult patients, and the questions addressing quality of care and patients satisfaction were constructed according to the Quality Satisfaction and Performance model [25]. The aim of the instrument is not only to measure general dimensions of the quality of service, but also some specific aspects associated with this type of client. The final instrument consisted of 18 items representing the following 4 areas:

1. quality and completeness of information received,
2. quality of relationship with physicians and nurses,
3. quality of treatment received,
4. quality of service organization.

Eight items were loaded in Factor 1, three items in Factor 2, three items in Factor 3, and four items in Factor 4.

Questions were assessed on a ten-point rating scale (level 1 indicates not at all satisfied, level 10 very satisfied).

The instrument also included some closed-ended questions regarding sociodemographic variables (sex, age, educational level, professional status, marital status, and for dialysis patients, how long the patient was undergoing dialysis, job, and dialysis centre).

Finally, the Quality Satisfaction and Performance model was correlated to the worker questionnaire for the perception of the internal climate, and Efficacy and Effectiveness of Care, performed by the Best Practice Analysis, were analyzed.

Statistical Analysis

Results are expressed as means \pm SD. The Statistical Package for the Social Sciences packet program was used for data analysis

Percentage estimation was used in the evaluation of the nurses socio-demographic and job related characteristics and chi-square test was used to determine the difference in the nurses opinions regarding their relations with co-workers and the views of their team members. Variance analysis was used in the evaluation of relationship between individual and work characteristics and psychometric tool scores. The effect of the role on burnout was adjusted with worker characteristics, such as gender, age, marital status, children, months in hospital.

Multiple regression analysis was used in the comparison of medical specialities.

The quartiles are performed in the worker burnout and patient satisfaction for health care service.

Variance analysis is performed.

Spearman rank-order correlation was used to examine relationships between patient satisfaction and staff burnout.

A p-value less than 0.05 was accepted to denote statistical significance.

RESULTS

A total of 390 questionnaires were given to workers, 149 (38%) were filled in correctly and used for this study. Response rates for patients was 62%, distributed across all hospital centres.

Step 1

In workers, there are differences in sex (male lower in physician than in nurses, p<0.01), and age (physicians older than nurses, p<0.01), and employed age (physicians older than nurses, p<0.01).

Table 2 shows the worker percent burnout: the workers of Surgery (S), Orthopaedic Unit (OU) and Intensive Care Unit (ICU) demonstrated higher burnout levels than Dialysis (D) and Internal Medicine (IM) (p=0.031). Total scores in the three dimensions of burnout did not give evidence of significant differences between physicians and nurses. When considered collectively, the nurses and physicians were found to have moderate degree job stress and near-high emotional exhaustions as well as moderate depersonalization, near low (perceived) professional accomplishment and job satisfaction. Factors associated with and/or accompanying job stress, burnout, and job satisfaction were weekly work hours, number of patients cared for day, and not age and years of work.

Figure 1 shows the quartiles of the questionnaire for the perception of the internal care climate and work material and instruments of single unit that we are screened: ICU is lower than IM and D (p<0.05), and S and OU is lowest (p<0.01).

Step 2

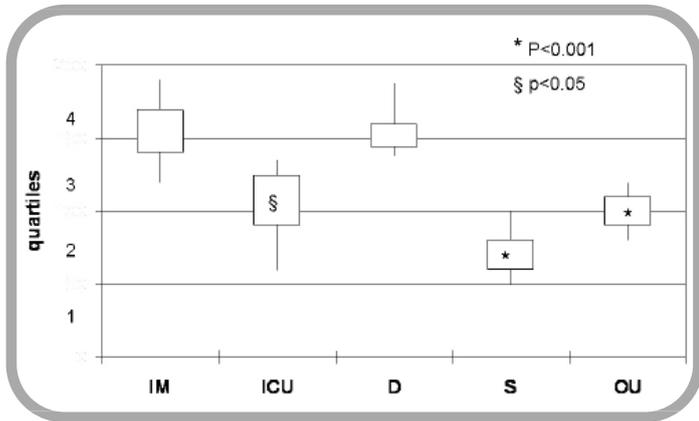
The Best Practice Analysis (as shown in Figure 2) analyzes the efficacy and effectiveness of the five hospital medical service. The D is the only unit in which efficacy and effectiveness are combined high; in ICU effectiveness is high and efficacy is low; in IM, S and OU efficacy and effectiveness are combined low.

Figure 3 shows the SEVIQ questionnaire of health care worker and patient satisfaction: there is a high statistical correlation of workers and patients about SEVIQ questionnaire ($y = 0.74x + 1.05$; $r = 0.874$; $p < 0.001$).

Step 3

In this section, results of exploratory factor analysis of the entire sample of patients are reported. We calculated mean values for

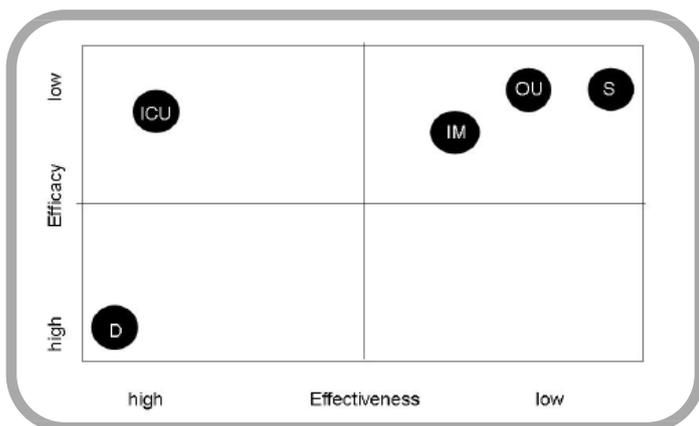
Figure 1 - The quartiles of the questionnaire for the perception of the internal care climate and work material and instruments of single unit



patient satisfaction and SD for each item in the questionnaire. Using mean values for all patients in the 4 dimensions of the questionnaire, we observed that the lowest perception of satisfaction regarded the completeness and clarity of information received in S, OU, ICU and IM; quality of relationships with physicians and nurses in ICU and S; quality of treatment received in OU an IM; and quality of service organization in IM and ICU. Regarding the age variable, in line with some previous studies [26-29], analysis of variance showed less satisfaction among younger patients, with statistically significant differences for dimensions regarding “completeness of the information received” ($F = 5.41$, $P < 0.01$) and “quality of relationships with physicians and nurses” ($F = 10.08$, $P < 0.001$).

In line with results of previous studies [30-32] it thus appears that the level of satisfaction in these patients is mainly associated with the quality of relationships.

Figure 2 - Analysis of the efficacy and effectiveness with Best Practice in Class of the five hospital medical service. The D is the only unit that efficacy and effectiveness are combined high; in ICU effectiveness is high and efficacy is low; in IM, S and OU efficacy and effectiveness are combined low.



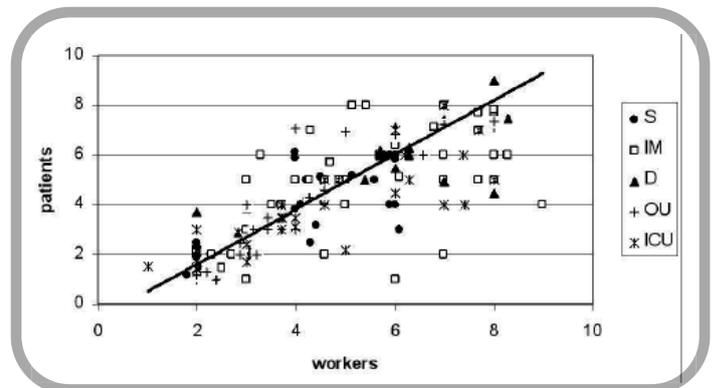
With regard to the objective of this study to correlate burnout levels in health care staff, and effectiveness-efficacy care, and patient satisfaction, figure 1 lists mean and median values of worker valuation: IM and D show higher mean and median values than ICU, S and OU ($p < 0.05$).

On the basis of the data collected, we confirm our hypothesis of negative correlations between patient satisfaction and the Emotional Exhaustion and Depersonalization dimensions, and a positive correlation between client satisfaction and Personal Accomplishment in all groups. In particular, there is a high statistical correlation ($P < 0.01$) between patient satisfaction and health care effectiveness.

DISCUSSION

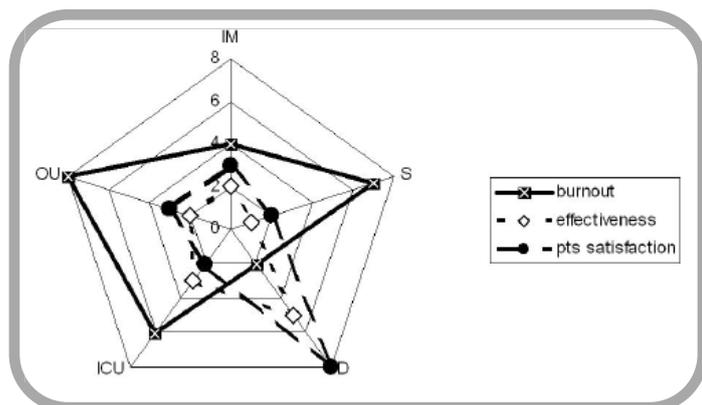
Health care workers have been described as the professional group with the highest risk for burnout, role conflict, and job dissatisfaction, that is related to job satisfaction, job-related stress and burnout [33-35]. Heavy workloads, long daily working hours, and negative perceptions of work conditions can lead to burnout [36,37]. Several studies conducted on healthcare personnel have shown that many factors such as inadequate payment, lack of harmony between received education and actual work, inadequate ongoing education, lack of the possibility of job advancement and negative work conditions affect job satisfaction [10, 12-21]. Regarding the analysis of burnout in nurses in dialysis, Arikan [18] demonstrated

Figure 3 - SEVIQ questionnaire answers of health care worker and patient satisfaction $y = 0.74x + 1.05$; $r = 0.874$; $p < 0.001$.



that workers of the dialysis showed, burnout values lower than reported by ward staff or intensive care unite. Argentero [21] showed that high levels of burnout in physicians and nurses are associated with poor patient satisfaction in dialysis units. Contemporary, we have confirmed the data of Argentero [38]. We think that the management of human resources is definitely one of the most important chapters of managerial activity. The human resources have always been put on the greatest level of importance, but now have risen again than to the financial factors and materials. People are the leading force of the organization, and the difference between failure and success can actually be individualized in the quality of the people of the organization. This is true also in other health care unites. This study confirms our primitive hypothesis, and partially agrees the Arikan data [18]. In fact, analysis of patient overall assessments of satisfaction showed a general appreciation for the “courtesy” and “kindness” of staff. The most critical dimension is in regard to information, in particular, concerning repercussions of the treatment on patient lifestyle, the ways in which it can limit work

Figure 4 - The worker burnout, and effectiveness of health care and patients satisfaction for single health care unities.



activities, and patient involvement in decisions about the treatment to be administered. The lower level of patient satisfaction could be explained because patients gradually focus their attention on more detailed aspects, which imply adjusting one's lifestyle, and because physicians give less attention and provide less information to patients. This assessment reflects the general tendency of patients to give more attention to the emotional-interpersonal and cognitive dimensions of health care, which are more immediately perceivable, than to more technical factors, which can be evaluated only if one has specific knowledge in the sector. Identification of these critical factors can be the starting point on which build and enhance the quality system by improving the structures, making the centres more comfortable, providing more information, and making sure that patients are more involved.

Moreover, our data explore patient satisfaction in several health care unities and correlate patient satisfaction (subjective aspects), and worker burnout (subjective aspects) to health care efficacy and effectiveness (objective aspects). The patients and workers consider non similar variables. If, as claimed by Vuori [29], clients assess the quality of health care on the basis of emotional and interpersonal factors, taking for granted that health care staff have the necessary technical skills, the quality of the interpersonal relationship established between workers and clients becomes the most important component for client satisfaction [39-41]. There are vicious cycles in which staff burnout may lead to deficits in patient care, which then contribute further to lower patient satisfaction and their association with compliance and clinical outcome.

Argentero, considering only dialysis centre, show that nurses registered higher emotional exhaustion levels compared with physicians, and analysis of patient overall satisfaction assessments showed general appreciation for the "courtesy" and "kindness" of staff, but evidence of problems regarding organizational aspects and structural factors. However, the most critical dimension was for "information." No significant correlation was found between staff depersonalization and patient satisfaction level [21].

Our data, inversely, show that single health care unit demonstrates that patient satisfaction correlates with staff burnout and level quality of care [41-46], and confirm our precedent studies that evidenced low job stress and burnout in dialysis workers [12,13,16,38]. This is true when compared with several heart care services, as also demonstrated by Arikian [18].

Moreover, it appears clear the association between staff bur-

nout and low patient satisfaction, and the relation of both of them with low effectiveness.

In conclusion, burnout is not a general problem in dialysis health care providers; it can be in surgery and emergency care where is fewer work place, low specialised work, low perceived relations with patients and physician, and negative professional relationship (Figure 4).

Our study confirm that burnout represents a dangerous cause of work failure, because burnout and staff work stress appear to exert significant negative influences in patients and their families [16].

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Il burnout del personale sanitario riduce l'efficacia e l'efficienza dei servizi sanitari e la soddisfazione del paziente

Razionale. Sebbene ci sia stato nel corso degli ultimi anni un interesse crescente nella valutazione della soddisfazione degli utenti rispetto all'assistenza sanitaria, vi sono relativamente pochi studi sulla valutazione della soddisfazione degli utenti in rapporto al *burnout* degli operatori.

Metodologia. Studio osservazionale del rapporto fra *burnout* e soddisfazione sul lavoro di medici ed infermieri con la soddisfazione dei pazienti. Sono stati reclutati per lo studio 191 operatori sanitari e 1234 pazienti. Il *burnout* dello staff è stato valutato con il Maslach *Burnout Inventory*. Sono state messe a punto tre sotto classifiche di *burnout* usando l'analisi fattoriale: Esaurimento emozionale, Depersonalizzazione, Realizzazione personale.

Esiti. La soddisfazione dei pazienti è stata valutata con un questionario a scelta multipla che includeva la completezza dell'informazione medica, la relazione emozionale con lo staff sanitario, la performance dello staff e aspetti organizzativi dell'assistenza sanitaria.

Risultati. Il *burnout* è presente nel 35% delle UO di Chirurgia, nel 20% di quelle di Medicina Interna, nel 10% delle Dialisi, nel 33% di quelle di Terapia Intensiva e nel 30% di quelle di Ortopedia. L'analisi della valutazione della soddisfazione dei pazienti ha mostrato un apprezzamento generale per la cortesia e la gentilezza dello staff, ma ha messo in evidenza alcuni problemi di tipo organizzativo e strutturale. Il fattore più critico è risultato comunque l'informazione. Esiste una correlazione positiva significativa fra la realizzazione personale dello staff e la soddisfazione degli utenti ($p < 0.01$) e fra l'esaurimento emozionale dello staff e la soddisfazione dei pazienti ($p < 0.01$).

Conclusioni. Elevati livelli di *burnout* nei medici e negli infermieri sono associati a una minore soddisfazione dei pazienti e a una minore efficacia ed efficienza dell'assistenza sanitaria. Il riconoscimento e l'adozione di misure di prevenzione del *burnout* dello staff potrebbe incrementare la soddisfazione dei pazienti e migliorare l'efficienza dei servizi sanitari.

Parole chiave *Burnout*, soddisfazione dei pazienti, qualità dell'assistenza sanitaria, efficienza ed efficacia delle cure.