Nurses' Job satisfaction: an Italian study

J. Sansoni*, W. De Caro*, A.R. Marucci*, M. Sorrentino**, L. Mayner***, L. Lancia****

Abstract

Background. *The aim of the work presented was to assess job satisfaction of a number of nurses from different departments working in public hospitals in Italy. The assessment was carried out through the combined use of questionnaires, which measured different aspects of job satisfaction, such as coping abilities, stress level and optimism/pessimism.*
The literature supports the fact that nurses' job dissatisfaction is closely connected with high levels of stress, burnout and physical and mental exhaustion, together with high workload levels and the complexity of care. The growing interest in measuring the levels of nurses' job satisfaction is attributable to a number of problems that have been raised worldwide, two of which are becoming ever so important: turnover and shortage of nurses. The research question is: Which are the main motivating factors of Italian nurses' job satisfaction/dissatisfaction?
Methods. *The study used a convenience (non probability) sample of 1,304 nurses from 15 different wards working in Italian public hospitals from a number of cities in northern, central and southern Italy. The survey instrument was a questionnaire consisting of 205 items which included 5 different questionnaires combined together.*
Results. *The results show a low level of job satisfaction (IWS= 11.5, JSS=126.4). However, the participants were overall happy about their job and considered autonomy and salary important factors for job satisfaction.*
Conclusion. *Research has shown that the nurses' level of satisfaction in Italian hospitals is low. The results revealed dissatisfaction with task requirements, organizational policies and advance in career. Nurses interviewed did not feel stressed and showed to be optimistic overall.*
New research on the subject should be conducted by focusing on ward differences, North and South of Italy and on gender differences.

Introduction

The work presented is aimed at assessing the job satisfaction of a number (n = 1,304) of nurses, from 15 different wards, working in Italian public hospitals through the use of combined questionnaires which measured different aspects of nurses' job satisfaction.

In the literature, only a limited proportion of nurses felt satisfied with their work in both general terms or in relation to specific themes, such as organizational policies, tasks assigned and salary.

Job satisfaction has been defined in many different ways, for the purpose of this article the authors decided to use that of Locke

* Nursing Research Unit-Department of Public Health and Infectious Diseases, Sapienza University, Rome, Italy
** Quality and Risk Management Service, ASL Caserta Italy
*** School of Nursing and Midwifery,Torrens Resilience Institute, Flinders University, Adelaide Australia
**** Nursing Science, Department of Health, Life and Environmental Sciences, University of L'Aquila, Italy

(1) "a pleasure or positive emotional state resulting from the appraisal of one's job or job experience" (p. 1304).

The literature supports the fact that nurses' job dissatisfaction is closely connected with high levels of stress, burn-out and physical and mental exhaustion (2, 4), together with high workload levels and the complexity of care. The growing interest in measuring the levels of nurses' job satisfaction is attributable to a number of problems that have been raised worldwide, two of which are becoming ever so important: high turnover and shortage of nurses. The literature is unanimous (4, 5) in identifying how these two problems seriously affect the health systems.

With respect to the turnover of nurses it can be said that this is one of the main indicators of nursing dissatisfaction, and it is probably related to the high level of stress that nurses have to cope with, especially as they suffer the highest levels of stress of all health professionals (6, 7). The levels of stress and dissatisfaction result in high turnover that, in turn, affects the cost of health systems, leading to additional expenditures that health systems have to manage. According to Murgia and Sansoni (8), the stress experienced by nurses immediately threatens the health of the professionals involved and causes a strain on the organization itself. It is clear that turnover can also be seen as a positive aspect, in the organization of new ideas and new work forces, but according to O'Brien-Pallas and colleagues (9), there are more negative than positive aspects for nurses.

Currently there is a considerable nursing shortage (10). This is deeply troubling, in the light of the fact that nurses are the most representative group of all health professionals and have the highest workload. The problem of shortage is a vicious circle because the low number of nurses involves a higher workload for the existing nurses, which in turn involves stress and dissatisfaction with work, causing the resignation of these nurses from hospitals, further decreasing their numbers.

Thus far two main consequences of the level of nurses' job satisfaction have been highlighted; according to Bratt (11) there are a variety of elements that can affect this. There are also various groups of job satisfaction theories which can be described as: a) *discrepancy theories*, which examine the extent to which workers' needs are satisfied in the workplace (12), b) *equity theories* which underscore social comparison in the evaluation of job rewards (13) and c) *expectancy theories* which focus on worker motivation (14, 15). According to a classical definition (1), job satisfaction "is a feeling of pleasure deriving from the perception that professional activities can satisfy important personal values related to work". This definition refers to a huge range of aspects such as, for instance, the recognition of a positive or negative emotional state which binds the individual to work, and the perception of harmony between work and personal values and the importance assigned to these values so determining the degree of satisfaction experienced.

According to Taris and Feij (16), job satisfaction can be described by two components - aspects of the intrinsic satisfaction which are those moving towards the achievement of success (achievement) and awards (recognitions) that a person seeks to achieve through his professional activities, and extrinsic aspects, related, instead, directly to the work context, such as, for instance, individual assessment of the organizational environment or the work content. Environmental factors are important and more closely related to organizational context such as the environment and the work itself (working conditions, types of jobs, salaries, independence and interpersonal relationships between colleagues). In addition to these two main dimensions, there are individual factors such as age, gender, race and so on and those affecting the individual

sphere. According with this taxonomy, Hegney *et al.* (17) identify some elements of intrinsic work values (the satisfaction of nursing work and being able to complete tasks during working hours) and extrinsic work values (remuneration and career progression) in the light of nurses' job satisfaction.

A wide range of job characteristics have been recognized as having a strong influence on job satisfaction, some examples are autonomy (18, 19), workload (20), task requirements and decision-making (21), and salary (22, 23). According to previous research, workload was found to have a high level of correlation with stress and the resultant level of job satisfaction and is recognized as the highest perceived stressor in the working nurses' environment (20). As far as the coping strategy of stress is concerned, the literature indicates that coping strategies – such, for instance, 'active coping' - are linked to self esteem, to lower perceived stress, as well as less active strategies (denial/self blame) are linked with poor self –esteem, to high perceived stress and psychological distress (24). Stress is one of the most studied factors in the literature. Coomber and Barriball (25) emphasize the high number of stress factors in the professional nurse and stress has been associated with mood changes, such as tension, anxiety, depression and chronic fatigue (20); according to Zangaro et al (19) "job stress has been consistently and negatively correlated with job satisfaction" (p. 446).

The main aim of this work was to measure job satisfaction among Italian nurses by defining the main motivating factors and understanding the impact of these factors on satisfaction and performance of individuals.

Materials and Methods

The study used a convenience sample (non probability sampling) of 1,344 nurses in 15 wards from Italian public hospitals in a number of cities in northern, central and southern Italy. Of the 1344 questionnaires sent to nurses, 20 were filled incorrectly and 20 were not returned, therefore the final sample size consists of 1,304 questionnaires. Thus only 1.5% questionnaires were not returned and only another 1.5% were filled in incorrectly. Data were gathered between March and June 2013.

This project was submitted for approval to the relevant Ethics Committees. The whole research was explained to potential participants before that they filled in the questionnaire to allow them to understand what the research involved and the aim of the research. Furthermore the voluntary nature of the participation was underlined. Agreeing to complete it was deemed to be acceptance of participation in the research.

The survey instrument was a questionnaire consisting of 205 items, structured in 5 parts, focusing on job satisfaction, as well as coping abilities, stress level and optimism/ pessimism. The items in the first part of the questionnaire (n=38) focused on socio-demographic information (age, sex, marital status, place of residence and qualifications; some items focused on the type of contract and working hours). The second part of the questionnaire was the 'Index of Work Satisfaction' (IWS) developed by Stamps (26), a multi-dimensional self compiled questionnaire specifically for nurses, validated by Cortese for Italy in 2007 (27). The IWS is structured in two sections (A and B) and evaluated the level of satisfaction across six variables - salary range, autonomy, role expectations, organizational aspects, interactions and professional status. Section A presented the definitions of the six factors taken into consideration, the factors are presented in pairs, in all possible combinations. The respondent was asked to choose which of the two was most important to determine his/ her level of satisfaction for each of the 15

pairs of factors. Section B, consisted of 44 items, which measured the current level of satisfaction through 6 factors (variables). For each item, the respondent can express his/her agreement or disagreement using a 7-point Likert scale ranging from 'strongly agree' to 'strongly disagree', including neutrality and indecision. In order to calculate the results of this individual questionnaire, the scores of the six variables of Part B were multiplied by their corresponding factor in Part A; the results of the variables are then summed to produce a single numerical value: the IWS index.

The third part of the questionnaire is the 'Job Satisfaction Survey' (JSS) developed by Spector (28): it includes 36 items and is used to measure job satisfaction evaluating professionals' attitudes to their job and aspects of their job. Respondents were asked to consider 36 items, or 4 items for each of the nine sub-scales; they could express their agreement or disagreement ranging from 1 ('strongly disagree') to 6 ('strongly agree'). The nine facets include pay, promotion, supervision, fringe benefits, contingent rewards, operating procedures, co-workers, nature of work and communication. The result of the total satisfaction is the sum of all 36 items. The score of each item may vary from 1 to 6 while the score of each aspect may vary from 4 to 24, the range from 4 to 12 indicates dissatisfaction and that from 16 to 24 indicates satisfaction.

The fourth part of questionnaire, Nursing Stress Scale (NSS), developed by Gray-Toft and Anderson (29) and consisting of 34 items, evaluates the level of work stress for nurses. Each item contained a statement that described a situation which can cause stress for nurses, the respondent can express the frequency of this situation from 1 (never) to 4 (very frequently). The scale consists of 7 subscales measuring: workload, uncertainty about treatment, conflict with other nurses, conflict with physicians, inadequate preparation, lack of support and

death/dying. The questionnaire "provides a total stress score as well as scores on each of seven subscales that measure the frequency of stress experienced by nurses in the hospital environment"(p. 11).

The fifth part of the questionnaire was the Brief Cope (30) questionnaire made up of 28 items which indicated how respondents reacted when they had to deal with a difficulty. This questionnaire was used to measure 14 ways of coping (self-distraction, active coping denial, substance use, use of emotional support, use of instrumental support, behavioral disengagement, venting, positive refraining, planning, humor acceptance, religion, and self blame). Each item contained a statement describing a situation and the respondent expressed his/her reaction from 1 (I haven't been doing this at all) to 4 (I've been doing this a lot).

The last part of the questionnaire is the Life Orientation Test- Revised LOT-R, developed by Carver et al. (31), and consisted of 10 items and evaluated the respondent's mood (optimism/pessimism). Each item contained a statement/situation and the respondent had to express his agreement or disagreement from 1 ('strongly disagree') to 5 ('strongly agree').

Results

The study used a convenience sample (non probability sampling) from 1,344 nurses in 15 wards of Italian public hospitals in a number of cities in northern, central and southern Italy who filled in 1,324 questionnaires, of these 20 were filled improperly, therefore the sample size went down to 1304. Thus only 20 (1.5%) were not returned and only another 20 (1.5%) were completed incorrectly. Data were gathered between March and June 2013.

The cohort consisted in a large majority of female (68.3%), the mean age was 41

Table 1 - Sample composition regarding sex

Sex	Frequency	Percentage
Male	412	31.7%
Female	889	68.3%

Table 2 - Sample composition regarding age

Age	Frequency	Percentage
Young <35	464	35.6%
Adults 35 - 50	662	50.8%
Elderly >50	178	13.6%

Table 3 - Sample composition regarding age and sex

Age	Sex	
	Male	Female
Young <35	129-27.9%	334-72.1%
Adults 35 - 50	195-29.5%	465-70.4%
Elderly >50	88-49.4%	90-50.6%

(range 22-66, 35.6 less than 35, 50.8% between 35 and 50 y and 13.6 over 50); marital status was 61% unmarried (Table 1 and Table 2). The mean number of years of service was 17.5.

The youngest participant of the sample as well as the adult section were women (72% and 70% respectively). While the older part of the sample was divided between the two genders (49.4% of male and 50.6% of female) (Table 3).

With respect to the level of education, about 87% of the cohort had a secondary degree in nursing, while 12% had a baccalaureate degree. More specifically looking at age, 80% of the cohort with a secondary degree in nursing consisted of adults, or over 50 (elderly) while 82% of those who had a bachelors level were young.

About 80% were satisfied with their work and their working hours, which for most nurses was between 30 and 40 hours per week, only 64% of respondents were satisfied with respect to the work environment, and a very high percentage of the cohort (80%) answered positively to "would you choose to be a nurse again?" (Table 4)

The standardized Cronsbach's coefficient value of the entire questionnaire was 0.80.

IWS – Index of Work Satisfaction

The IWS is a two-part instrument aimed to evaluate nurses' job satisfaction on six factor namely pay, autonomy, task requirements, organizational policies, professional status and interaction. The combination of the two parts of the questionnaire leads to the calculation of the IWS. The value of our sample was 11.5. All indices calculated, including the final IWS value, fall into the second quartile and indicate a generally low level of job satisfaction. More specifically, in light of Table 5, and looking at the individual aspects taken into consideration, two aspects are most important and had the higher level of satisfaction for the cohort: they were pay (=salary) and autonomy, followed by professional status and interaction with colleagues. Finally, the aspects with the lowest values were those related to task requirements and organizational policies.

Table 4 - General satisfaction

	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Job satisfaction	1059	81.3%	243	18.7%
Working hours satisfaction	1023	78.6%	279	21.4%
Environmental satisfaction	817	62.7%	486	37.3%

Table 5 IWS outcomes

Component	Component Scale Score	Component Mean Score	CWC	Component Adjusted Score
Pay	22.5	3.7	3.5	13.1
Autonomy	31.0	3.9	3.4	13.3
Task Requirements	19.4	3.2	2.9	9.4
Organizational policies	25.6	3.6	2.6	9.6
Professional Status	25.9	3.7	3.1	11.7
Interaction	39.1	3.9	2.9	11.6
Total	163.5	3.7	3.1	11.5

JSS - Job Satisfaction Survey

As far as the questionnaire on job satisfaction was concerned, the T-test value was <.0001 for all items.

The participants were only satisfied with two aspects - the relationship with colleagues and nature of the work. The participants were definitely dissatisfied regarding the possibility of career advancement and also with regard to the salary, although less markedly; the sample was rather neutral for the majority of the other variables. The average value (126.4) shown was neutral, i.e. the cohort was neither satisfied nor dissatisfied (Table 6).

NSS - Nursing Stress Scale

The average responses to all items showed that the participants had not experienced situations or circumstances that have led to a status of work-related stress in their working life. There were some rare exceptions relating to seeing patients suffering (heading: seeing patients suffering or feeling powerless about their state of health) or when there was insufficient staff.

Brief COPE

First of all, there was not a specific tool to analyse the Brief COPE, therefore we have proceeded to a descriptive statistical

Table 6 - JSS Mean and Std. Deviations Values

Aspect	Mean and Confidence Interval at 95%	Range	Std. Deviation	T-test	Significance
Pay	12.7 ± 0.14	4-24	2.6	176.6	<.0001
Promotion	11.5 ± 0.19	4-24	3.4	122.7	<.0001
Supervision	14.5 ± 0.12	4-24	2.4	215.3	<.0001
Fringe Benefits	14.2 ± 0.14	4-24	2.7	189.9	<.0001
Contingent Rewards	13.2 ± 0.17	4-24	3.1	151.8	<.0001
Operating Procedures	13.3 ± 0.15	4-24	2.7	177.7	<.0001
Coworkers	16.6 ± 0.23	4-24	4.2	142.4	<.0001
Nature of Work	16.8 ± 0.22	4-24	3.9	154.1	<.0001
Communication	14.4 ± 0.17	4-24	3.0	170.1	<.0001
Satisfaction	126.4 ± 0.67	36-216	12.3	369.9	<.0001

Table 7 - Brief Cope Mean

Strategies	Mean
Active coping	3.1
Planning	2.8
Positive reframing	2.7
Acceptance	2.5
Humor	1.8
Religion	2.2
Emotional support	2.3
Instrumental support	2.5
Self-distraction	2.3
Denial	1.7
Venting	1.7
Substance abuse	1.1
Behavioural disangagement	1.5
Self blame	2.3

analysis. Table 7 shows that the most utilised COPE strategies were active coping (average 3.1) and planning (average 2.8), while the less utilised were substance abuse (average 1.1) behavioural disengagement (1.5) and denial (1.7), where 1 was the lowest value (I haven't been doing this at all) and 4 is the highest (I've been doing this a lot). More specifically according to Table 7 the most utilised strategies were also positive reframing, acceptance, use of instrumental support, use of emotional support, self distraction, the less utilised are denial, venting, humor.

To have a deeper understanding of the phenomenon, a factorial analysis has been carried out trying to identify the most relevant factors in coping from the participants. The first factor emerged which can be called "difficulty", and just alone explains most of the variability of the results. Most of the items were positively linked with respect to the first factor "difficulty", some were negatively linked to it. The values with a negative sign influence in the opposite direction the Brief Cope. The factorial analysis was rather unstable which led to contradictory results.

LOT-R – Life Orientation Test- Revised

This tool was developed to assess individual differences between optimism and pessimism and consisted of 10 items, including 4 which were neutral, 3 focused on optimism and 3 on pessimism. The cohort was generally optimistic, this in the light of both sets of questions (pessimistic and optimistic). In Table 8 the cohort was optimistic about the future, with values showing a high percentage of optimism. As regards the part with pessimistic statements, the values of the cohort displayed that just in one case an agreement with the pessimistic statement while, in the remaining two, the cohort disagreed with the pessimistic statement (showing to be optimistic).

Discussion and Conclusion

The aim of this study was to explore Nurses' job satisfaction.

Job satisfaction in care environments is a very important factor to look at, because it

Table 8 - Life Orientation Test

Question	Agree	Disagree	Neutral
In uncertain times I usually expect the best	756-58.1%	298-22.9%	247-19.0%
I'm always optimistic about my future	798-61.4%	288-22.2%	213-16.4%
Overall I expected more good things to happen to me than bad	902-69.4%	221-17.0%	176-13.6%
If something can go wrong for me, it will	407-31.2	632-48.5%	264-20.3%
I hardly ever expect things to go my way	621-47.7%	415-31.6%	265-20.7%
I rarely count on good things happening to me	435-33.4%	635-48.8%	231-17.8%

is an important predictor of turnover issues, a nurse satisfied is less likely to became a nurse who resigns. As a preliminary this study confirmed that pay, autonomy, nurse–physician or peers interactions had a high correlation and influence with respect to job satisfaction.

The IWS for the present study was 11.5 (derived from calculations from both Parts A and B). When compared with those from other similar studies, this value showed that the findings of this study confirmed those reported in the literature (32, 34) and displayed a low level of job satisfaction.

Regarding the values analysed individually, Table 5 showed that the ranking for this study was: autonomy, pay, professional status, interaction, organizational policies and task requirements. Therefore the two areas with the highest values were autonomy and pay, the former was the degree of independence, initiative, and freedom in daily work, the latter was seen as the amount of money or benefits derived from one's own work, with a value of 13.3 and 13.1 respectively. Despite having a higher value in comparison with other components, these two values were still low, which indicated that the participants had a low level of satisfaction for these two components. Autonomy had a value which confirmed previous findings (35); certainly, this confirms what the literature (14, 19, 36) said, ranking autonomy as one of the most prominent aspects which influence nurses' satisfaction, particularly in comparison with studies conducted in hospitals rather than in specialty facilities. The need for autonomy and its correlation with overall job satisfaction is certainly also to be ascribed to the changing role of the nurse in Italy; expansion of the nurses' role is indeed strictly interconnected with the need for autonomy: nurses increasingly feel the need to expand their role.

With regard to the values on organizational policies and task organization, which made the least contribution to the participants'

job satisfaction, values were both less than 10, figures which were in accordance with previous studies (26, 32, 33). According to Adams and Bond (14) organizational features were "predictors of job satisfaction over and above the importance of individual nurse characteristics" (p. 542), and the results showed clearly a very low level of satisfaction with respect to this.

Looking at the values of the JSS (Table 6) the overall results showed a cohort which went from a rather negative attitude towards a fairly neutral one, which indicated neither satisfaction nor dissatisfaction about the job. This study showed a neutral cohort, with a general average of 126.4 (range 36-216) as a total, thus the cohort does not consider itself either satisfied or dissatisfied. It is interesting to note that the cohort confirmed its satisfaction with the work it did (this confirmed what was said for the question, "are you satisfied about your job?" where 80% of the participants responded affirmatively - Table 4), having a high value of satisfaction for the heading 'nature of the job' (this confirmed what was said for the question, "would you choose to be a nurse again?" where 80% of the cohort responded affirmatively – Table 4). With respect to the value of career advancement (= promotion), with which the participants were unhappy, this can be compared to the desire/need for autonomy (seen as heading in the IWS questionnaire) and to expand the boundaries of the role, since the two factors may actually be related.

Comparing and analyzing the IWS and JSS values according with the taxonomy carried out by Hegney (17) both intrinsic and extrinsic values of job satisfaction had in this study a very low level of satisfaction. As seen the above mentioned scholar (17) identified "being able to complete tasks during the working hour" as an example of intrinsic values of job satisfaction which are, according to this scholar, those moving towards the achievement of success. Results of this study showed an IWS value for

this heading of 9.4, which was the lowest value. In the JSS questionnaire the lowest value was for the heading "promotion" (11.4), which was one of the extrinsic values of job satisfaction, according to Hegney (17), and it was, again the lowest value for the questionnaire. In the light of this the participants showed they were dissatisfied.

Referring to the values already observed, or at least similar in the IWS, it can be seen that the value of satisfaction with the staff does not match. As seen in the literature, co-workers interaction is one of the aspects that shows most nurses' job satisfaction because environmental factors are important to assess job satisfaction (15, 21, 37). Interestingly in the IWS and in JSS there were conflicting results: indeed JSS values were certainly high (16.6), while in IWS the similar heading was low (11.6). The difference between the two values can be due to the different way to ask the question in the two questionnaires. In addition to this, splitting the value into two different heading in the IWS questionnaire, i.e. interaction with peers and interaction with physicians, the value showed that there was a higher level of satisfaction with the interaction between peers (value=12.29), rather than with physicians (value=10.92): this aspect should be underscored as support was a strong determinant of job satisfaction (38), and it should be borne in mind that according to Griffin (37) "team implementation can enhance the motivational properties of work and increase job satisfaction" (p.537).

Results from, the 'autonomy value' agreed and followed the literature, proving to be an important aspect in the evaluation of job satisfaction, furthermore autonomy of the individual nurse was correlated with the level of interaction among peers and between physicians and nurses, given the nature of the work of nurses strictly interconnected with other colleagues.

The part of the questionnaire which raised concerns and does not confirm the findings from literature was that focusing on the level of stress. The highest recognized level of stress that nurses suffered, as shown in the literature (19, 20, 25), was not apparently perceived by the cohort in the study. The cohort does not show to have had episodes in their careers which led them to suffer from job-related stress. This result is surprising when compared to the literature that indicates the stress suffered by nurses is one of the harbingers of turnover; however, it fully correlated to the deductions made from answers to certain individual questions, i.e., those on satisfaction and making the same career choice (nursing).

As far as the Brief COPE questionnaire is concerned, two analysis have been carried out, a descriptive analysis and a factor analysis, being the brief cope an instrument, not designed to obtain an overall score. According to literature, Krageloh (39) stated "the structure of the COPE is considerably unstable, with results often highly dependent on the method of factor analysis employed" (p. 217). According to the descriptive analysis the most used coping strategies were, as seen, active coping and planning, those results were strictly interconnected with those of the previous section of the questionnaire; indeed, the participants used as a strategy to cope with stress factors being active both with active coping: "I've been concentrating my efforts on doing something about the situation I'm in" "I've been taking action to try to make situation better" and planning a number of activities in order to solve issues they were faced with ("I've been thinking hard about what steps to take"). This showed that not only nurses need more autonomy and room in order to manage and organize their own daily job, but that they were able and willing to do it. Furthermore among the most used strategy the results also showed the use of emotional and instrumental support showing the

necessity to have interaction and relationship with their peers and with physicians, as seen in the IWS and JSS. The results showed that the participants did not use either denial, venting or behavioral disengagement, and this was strictly connected with both previous sections of the questionnaire as well as to the most used strategy (active coping and planning); therefore it is clear that the participants were rather active in thier life style and probably also in their working daily behavior, in strong opposition with a more pessimistic and disengaged attitude which was displayed by disengagement behavior for instance.

The last part of the test showed a sample which confirmed to be optimistic as deduced from the other questionnaires, particularly the questions on stress and the general inquiries made in the early demographic part.

Interestingly the participants were consistent in their answers: the last 3 questionnaires (NSS, Brief Cope and Life Orientation test) were fairly reliable showing a sample rather optimistic, not stressed and active in their coping strategies, which followed the result of literature which links self esteem/lower perceived stress/ lower psychological distress with functional coping strategies.

The most striking aspect, however, was that when the participants were asked if they were satisfied with their job, they responded positively - contrasting with the results of IWS where the cohort was clearly dissatisfied and with those of JSS where the cohort was neutral. This was probably due to the fact that, when a participants were asked about job satisfaction and whether they would make the same career choice, people tend to give an immediate affirmative response but when confronted with a questionnaire with questions about specific elements, they start to think more and focus on more negative aspects, leading to a negative score.

This research has shown that the nurses' level of satisfaction in Italian hospital is fairly low, participants revealed dissatisfaction with task requirements, organizational policies, advance in career - although to a lesser extent - with the relationship with colleagues and physicians. They were overall satisfied about their job, autonomy and salary. They were not stressed, fairly active to cope with daily work related stress and showed to be overall optimistic.

To conclude, the study underlines the weight of organizational features seen not only as organizational policies but also as level of autonomy and interaction with colleagues (both peers and physicians) as predictor of nurse's job satisfaction, consequently hospital managers should take into account those facts in order to create a better workplace and therefore happier and more satisfied nurses.

Hospitals should take into account nurses' job satisfaction level and to improve it with a number of different changes within their organization, developing for instance new roles for nurses staff, enhancing communication within physician.

There are a number of limitations in this research that should be acknowledged. The generalizability of our results is not representative for Italian nurses: this is due to the sample size and the nature of the cohort, furthermore most of the participants were female and young. The questionnaire was quite long (205 questions) and was filled in during the working time, although in a pre definite specific moment and amount of time. Further research on the subject should be made into ward differences, North and South of Italy, small and large cities and focusing on gender differences.

Riassunto

La soddisfazione professionale negli infermieri: uno studio italiano

Introduzione. Questo studio ha come obiettivo di valutare la soddisfazione professionale di infermieri che lavorano in alcuni ospedali pubblici in Italia, attraverso l'uso combinato di questionari i quali misurano differenti sfaccettature quali la soddisfazione personale, la capacità di coping, lo stress e l'ottimismo/pessimismo.

La soddisfazione professionale degli infermieri, così come rivelato anche in letteratura, è fortemente legata all'alto livello di stress, al *burn-out*, all'esaurimento fisico e mentale, insieme ad alti livelli di carico di lavoro e complessità assistenziale. Vi è interesse crescente sull'argomento, che è attribuibile principalmente a due problemi prioritari per l'infermieristica: il turnover e il basso numero di infermieri.

La domanda di ricerca è stata: quali sono i principali fattori di soddisfazione professionale tra gli infermieri italiani?

Metodi. Lo studio ha utilizzato un campione di convenienza (1304 infermieri) di 15 diversi reparti di ospedali pubblici italiani, in alcune città del nord, del centro e del sud Italia. È stata utilizzata una combinazione di questionari, per un totale di 205 item.

Risultati. I risultati mostrano un basso livello di soddisfazione professionale (IWS= 11.5, JSS=126.4). ma il campione dimostra di essere contento per il lavoro scelto e considera l'autonomia, il salario come importanti aspetti per la soddisfazione personale.

Conclusioni. La ricerca suggerisce che il livello della soddisfazione professionale è basso, il campione mostra di essere insoddisfatto rispetto ai compiti da svolgere, alle politiche organizzative e all'avanzamento di carriera; il campione non è stressato ed è complessivamente ottimista. Nuove ricerche sull'argomento sarebbero utili per valutare differenti reparti, comparando Nord e Sud Italia e ponendo l'accento anche sulle differenze di genere.

References

1. Locke, EA. The nature and causes of job satisfaction. In: Dunnette M, ed. Handbook of industrial and organizational Psychology. Chicago: Randy McNally, 1976: 1297-1349.
2. Blegen MA. Nurses' job satisfaction: a meta-analysis of related variables. Nurs Res 1993; 42(1): 36-41.
3. Aiken L, Clarke S, Sloane D, et al. Nurses' reports on hospital care in five countries. Health Aff (Millwood) 2001; **20**(3): 43-53.
4. Gurková E, Soósová MS, Haroková S, Ziaková K, Serfelová R, Zamboriová M. Job satisfaction and leaving intentions of Slovak and Czech nurses. Int Nurs Rev 2013; **60**(1): 112-21.
5. Hayes B, Bonner A, Pryor J. Factors contributing to nurse job satisfaction in the acute hospital setting: a review of recent literature. J Nurs Manag 2010; **18**(7): 804-14.
6. Sullivan T, Kerr M, Ibrahim S. Job stress in healthcare workers: highlights from the National Population Health Survey. Hosp Q 1999; **2**(4): 34-40.
7. De Gieter S, Hofmans J, Pepermans R. Revisiting the impact of job satisfaction and organizational commitment on nurse turnover intention: an individual differences analysis. Int J Nurs Stud 2011; **48**(12): 1562-9.
8. Murgia C, Sansoni J. [Stress and nursing: study to evaluation the level of satisfaction in nurses]. Prof Inferm 2011; **64**(1):33-44.
9. O'Brien-Pallas L, Griffin P, Shamian J, et al. The impact of nurse turnover on patient, nurse, and system outcomes: a pilot study and focus for a multicenter international study. Policy Polit Nurs Pract 2006; **7**(3): 169-79.
10. International council of nurses(ICN). The global shortage of registered nurses: an overview of issues and actions, 2006. Available at: http://www.icn.ch/ [Last access: February 8, 2016].
11. Bratt MM, Broome M, Kelber S, Lostocco L. Influence of stress and nursing leadership on job satisfaction of pediatric intensive care unit nurses. Am J Crit Care 2000; **9**(5): 307-17.
12. Locke EA. What is job satisfaction?. Organ Behav Hum Perform 1969; **4**(4): 309-336.
13. Mowday RT. Equity theory predictions of behavior in organizations. In: Steers R, Porter LW, Bigley G, eds. Motivation Work Behaviour. 6th ed. New York: McGraw-Hill, 1996; 111-31.
14. Adams A, Bond S. Hospital nurses' job satisfaction, individual and organizational characteristics. J Adv Nurs 2000; **2**(3): 36-43.
15. Utriainen K, Kyngäs H. Hospital nurses' job satisfaction: a literature review. J Nurs Manag 2009; **17**(8): 1002-10.
16. Taris R, Feij FA. Longitudinal examination of the relationship between supplies-values fit and work outcomes. Appl Psychol 2001; **50**(1): 52-81.
17. Hegney D, Plank A, Parker V. Extrinsic and intrinsic work values: their impact on job satisfaction in nursing. J Nurs Manag 2006; **14**(4): 271-81.

18. Tzeng HM. The influence of nurses' working motivation and job satisfaction on intention to quit: an empirical investigation in Taiwan. Int J Nurs Stud 2002; **39**(8): 867-78.

19. Zangaro GA, Soeken KL. A meta-analysis of studies of nurses' job satisfaction. Res Nurs Health 2007; **30**(4): 445-58.

20. Healy CM, McKay MF. Nursing stress: the effects of coping strategies and job satisfaction in a sample of Australian nurses. J Adv Nurs 2000; **31**(3): 681-8.

21. Campbell SL, Fowles ER, Weber BJ. Organizational structure and job satisfaction in public health nursing. Public Health Nurs 2004; **21**(6): 564-71.

22. Seo Y, Ko J, Price JL. The determinants of job satisfaction among hospital nurses: a model estimation in Korea. Int J Nurs Stud 2004; **41**(4): 437-46.

23. Tourangeau AE, Cummings G, Cranley LA, Ferron EM, Harvey S. Determinants of hospital nurse intention to remain employed: broadening our understanding. J Adv Nurs 2010; **66**(1): 22-32.

24. Muller L, Spitz E. [Multidimensional assessment of coping: validation of the Brief COPE among French population]. Encephale 2003; **29**(6): 507-18.

25. Coomber B, Barriball KL. Impact of job satisfaction components on intent to leave and turnover for hospital-based nurses: a review of the research literature. Int J Nurs Stud 2007; **44**(2): 297-314.

26. Stamps, PL. Scoring Workbook for Index of Work Satisfaction. Market Street Research: Northampton, MA, 1977.

27. Cortese CG. La soddisfazione lavorativa del personale infermieristico. Adattamento italiano della Scala Index of Work satisfaction di Stamps. G It Med Lav 2007; **98** (3): 175-91.

28. Spector PE. Job satisfaction: Application, assessment, causes, and consequences. Sage: Thousand Oaks CA: 1997.

29. Grey-Toft P, Anderson J. (1981) The Nursing Stress Scale: development of an instrument J Behav Assess 1981; **3**: 11-3.

30. Carver CS. You want to measure coping but your protocol's too long: consider the brief COPE. Int J Behav Med 1997; **4**(1): 92-100.

31. Carver CS, Scheier MF, Segerstrom SC. Optimism. Clin Psychol Rev 2010; **30**(7): 879-89.

32. Mancini V. The relationship between a shared governance management structure and registered-nurse job satisfaction. In: Stamps P, ed. Nurses and work satisfaction: an index of measurement. 2nd ed. *Chicago*: Health Admnistrator Press, 1997: 133-9.

33. Curtis EA. Job satisfaction: a survey of nurses in the Republic of Ireland. Int Nurs Rev 2007; **54**(1): 92-9.

34. Cheung K, Ching SS. Job satisfaction among nursing personnel in Hong Kong: a questionnaire survey. J Nurs Manag 2014; **22**(5): 664-75.

35. Stamps PL, Piedmonte EB. Nurses and work satisfaction: An Index for measurement. Ann Arbor, Michigan : Health Administration Press Perspectives, 1986.

36. Flanagan NA, Flanagan TJ. An analysis of the relationship between job satisfaction and job stress in correctional nurses. Res Nurs Health 2002; **25**(4): 282-94.

37. Griffin MA, Patterson MG, West, MA. (2001) Job satisfaction and teamwork: the role of supervisor support. J Organ Behav 2001; **22**: 537-50.

38. Carter MR, Tourangeau AE. Staying in nursing: what factors determine whethernurses intend to remain employed? J Adv Nurs 2012; **68**(7): 1589-600.

39. Krägeloh, CU. A systematic review of studies using the Brief COPE: Religious coping in factor analyses. Religions 2011; **2**(3): 216-46.

Corresponding author: Prof. Julita Sansoni, Department of Public Health and Infectious Diseases, Sapienza University of Rome, P.le Aldo Moro 5, 00185 Rome, Italy
e-mail: Julita.sansoni@uniroma1.it