

ASSESSMENT OF STRESS AND SATISFACTION IN NURSES, AS PART OF HOSPITAL ACCREDITATION

ILEANA PAULA IONEL¹, PETRU ARMEAN², FLORENTINA LIGIA FURTUNESCU³

^{1,2}“Prof. Dr. Th. Burghel” Clinical Hospital of Urology, Bucharest^{2,3}“Carol Davila” University of Medicine and Pharmacy, Bucharest

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Abstract: Our study aimed to assess job satisfaction and perceived stress in nurses working in a clinical hospital of excellence during the preparation for accreditation. We performed a descriptive cross-sectional survey in 62 nurses, using two tools: one assessing job satisfaction and the Perceived Stress Scale 14 (PSS-14). We found that most of the nurses working in the selected hospital are generally satisfied or very satisfied about their workplace, and have a medium level of perceived stress. With all the limitation of this study, the results support the adoption of routine evaluation of stress and job satisfaction in hospitals, as valuable tools for improving the working environment.

INTRODUCTION

Hospital accreditation is a compulsory condition for functioning within the social health insurance system in Romania, stipulated by law.(1,2) The process is complex and implies a detailed assessment structured on references (strategic and organizational management, clinical management, medical ethics and patient’s rights), each including specific standards, criteria and requirements.(3) One important criteria for accreditation is regular assessment of job satisfaction of the medical staff. Job satisfaction refers to the degree in which an employee enjoys his job, reflecting his general attitude or perception in relation to his work (4). This is a topic of interest in the last decades, lot of evidence suggesting that it is associated to productivity, patients’ satisfaction, quality of the medical care, dedication for the employer and low turnover of the medical staff.(5-9)

Among the factors affecting the job satisfaction in nurses, the working conditions, the poor relationship with patients, peers or managers, the salary and the organizational climate are more frequently mentioned.(7,10-12)

Many studies suggest that job satisfaction is significantly and negatively correlated to the individual perceived stress.(13,14)

Measuring job satisfaction of the health staff working in hospitals and understanding the reasons of low satisfaction allow to define appropriate policies aimed to improve the work environment, to facilitate the retention and staff and to increase the productivity and the quality of medical care.

PURPOSE

This study aimed to assess job satisfaction and perceived stress in nurses working in a clinical hospital of excellence during the preparation for accreditation.

MATERIALS AND METHODS

We performed a descriptive cross-sectional survey which was conducted in a single hospital of excellence from Bucharest. The study was conducted during the preparation for accreditation. The target population was represented by the medical staff with permanent position in the hospital. This paper

reports only data for nurses.

The study tools were represented by two questionnaires:

- a questionnaire aimed to measure the job satisfaction. This tool was prepared by a consultant supporting the hospital for accreditation, based on the national standards, criteria and requirements. The questionnaire had 21 questions referring to: working environment, including safety, relationship with managers, perception on career development, motivation, perceived satisfaction and patient satisfaction. All questions had five possible answers expressed upon a Likert scale (from completely unsatisfied to very satisfied).
- the Perceived Stress Scale - 14 items (PSS-14) for perceived stress level measurement - Romanian version, previously applied in other studies (15, 16). The PSS-14 comprises fourteen questions about potential stressful situations experienced during the last month, each having five possible answers quantified upon a Likert scale. Half of the items are negative (items 1, 2, 3, 8, 11, 12 and 14, with response “never” is quantified as 0 points) and half positive (items 4, 5, 6,7, 9, 10 and 13, in which the response “never” is quantified in 4 points. PSS-14 overall score is obtained by summing across all 14 items, ranging from 56 to 0, with higher scores indicating higher levels of stress. Studies investigating the psychometric properties of this scale showed they are “acceptable” and, despite the recommendation to preferably use the PSS-10, we have chosen PSS-14 due to its previous use in Romanian.

We investigated 94 nurses having a permanent working contract with the hospital. The questionnaires were distributed in the same hard copy package and the nurses were asked to fill in anonymously and to bring them in a special box, for confidentiality reasons. We obtained 62 valid responses to both tools (response rate of 66%). Our respondents were all women, aged between 23 – 64, mean age 46±7.32.

Data analysis: the answers were codified and registered in an Excel database and analysed using SPSS v 23.0. The PSS-14 score was calculated by summing the scores to each of the fourteen questions. The quantitative variables (age, PSS-

¹Corresponding author: Ileana Paula Ionel, Str. Dr. Leonte Anastasievici, Nr. 1-3, București, Sector 5, E-mail: ionelileanapaula@yahoo.com, Phone: +40723 369027

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14 score) were analysed as mean ± standard deviation, median, minimum and maximum value. Distribution was tested for normality using the Shapiro Wilks test. A level of confidence of 95% was considered.

The qualitative variables were analysed as absolute and relative frequency. Chi square or Fisher exact tests (if the case) were used for comparison.

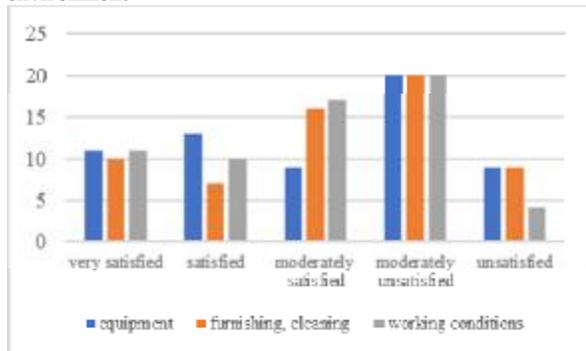
Spearman bivariate correlation was used for comparing the PSS global score to job satisfaction and patient satisfaction, as perceived by the nurses.

RESULTS

Job satisfaction: in general, most of the respondents declared they were very satisfied (47%, n=29) or satisfied (47%, n=29) about their working place, but four among them declared they are unsatisfied or very unsatisfied. 88.7% of the responders considered that their work is very attractive (48.4%) or attractive (40.3%).

The satisfaction regarding the working environment explored more dimensions: endowment with necessary equipment, furnishing and cleaning of the working space and working conditions. Results are shown in figure no. 1.

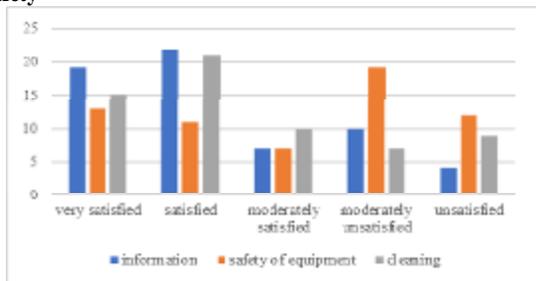
Figure no. 1. Nurses' satisfaction regarding the working environment



Only almost half of the nurses are satisfied or very satisfied about the working environment, without significant differences among perception on equipment, cleaning or working conditions (p=0.553, Chi² test).

The satisfaction in relation to work safety explored perception information provided at organizational level regarding the safety at work, the safety of equipment and their cleaning condition (figure no. 2). We found a significantly better perception regarding the information and cleaning of equipment, but some concerns related to their safety (p=0.482 and p=0.021 respectively, Chi² test).

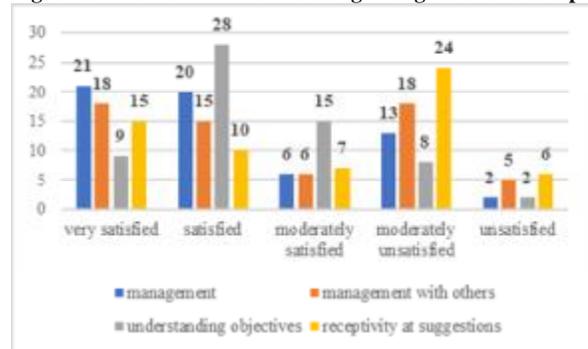
Figure no. 2. Nurses' satisfaction regarding the workplace safety



Perception on the relation to managers and peers was explored by few direct questions regarding: communication to the managers, communication of the manager with others,

understanding of the professional objectives and receptivity of the management to staff proposals (figure no. 3).

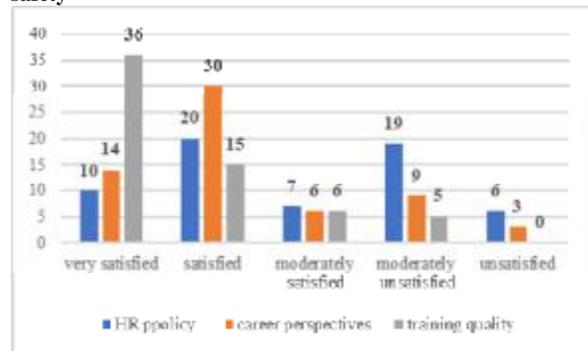
Figure no. 3. Nurses' satisfaction regarding the relationship



Two thirds of nurses are satisfied or very satisfied about their relationship with the management, but communication with others is well perceived in a lower proportion (53%), despite no statistical significance was found (p=0.552, Chi² test). Despite a high satisfaction regarding the relation to management, only 60% of the respondents are satisfied or very satisfied about understanding their professional objectives and the expectations of the others (p=0.025, Chi² test). The lowest satisfaction was found in relation to receptivity of the managers to others proposals (40% of responders very satisfied or satisfied).

Perception related to professional development and career opportunities within the organization was another direction for research (figure no. 4).

Figure no. 4. Nurses' satisfaction regarding the workplace safety



Among the respondents, 48%, 71% and 82% respectively are satisfied or very satisfied in relation to organizational policy for promotion, to personal perspectives for career development within the organization and to quality of continuous training provided by the employer. Significantly more respondents are satisfied with the training (p=0.010, Chi² test) or optimistic about career development (p<0.001, Chi² test), compared to those satisfied about the organizational policy for promotion

The level of perceived stress showed overall values between 4 and 36, with a mean of 19.81±7.415 and a median of 20.5. Although no thresholds are available in the literature, some Romanian studies classify the perceived stress upon the global PSS score as “low” (0 – 14), “moderate” (15 – 28), “high” (29 – 42) or “very high” (43 – 56). (16) In our group, 21%, 71% and 8% of the subjects had low, moderate and high stress respectively. The PSS-14 overall score had a symmetrical distribution (p=0.702, Shapiro Wilks test).

The PSS-14 overall score was negatively and weak correlated with the level of satisfaction, but this correlation didn't meet the statistical significance ($r=-0.180$, $p=0.160$). the same situation was found in relation to perception on patients' satisfaction ($r=-0.51$, $p=0.692$).

Also a positive and weak correlation was found between individual satisfaction and perception about patient' satisfaction, but again, this correlation didn't meet the statistical significance ($r=0.145$, $p=0.162$).

DISCUSSIONS

Our study was performed in nurses, during the preparation for hospital accreditation. The assessment of the job satisfaction was a compulsory requirement for accreditation, meanwhile the assessment of perceived stress was the initiative of the management, in order to better understand the psychological wellbeing of the staff.

Despite numerous limitations, this research showed that assessment of staff satisfaction could be very useful in identifying factors that affect the work performance and the quality of care. In our study, lowest level of satisfaction were found for working conditions, furnishing, cleaning and availability of equipment and highest level was found for quality of continuous training and for career perspectives. Majority of the respondents had a medium level of perceived stress, but no significance was met in correlating perceived stress with general satisfaction.

Among the limitations we consider the moderate response rate, and the period for applying the questionnaire (during preparation for accreditation), which might induce more willingness to comply to requirement from the staff, and, consequently, distortions in responses, for the assessment of both satisfaction and stress. Another limitation was due to decision to not collect demographic data (age, level of studies), in order to protect the anonymity.

The generalizability of the data for all nurses working in hospitals is limited, due to the fact that we included in the study a limited and selected population

CONCLUSIONS

Our study showed that most of the nurses working in the selected hospital are generally satisfied or very satisfied about their workplace, with some inconvenients related to working conditions, cleaning and availability of needed equipment. Also most of the nurses have a medium level of perceived stress. Our attempts to associate the perceived stress with job satisfaction showed a negative weak correlation, but without meeting the statistical significance.

With all the limitation of this study, the results support the adoption of routine evaluation of stress and job satisfaction in hospitals, as valuable tools for improving the working environment.

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