



PERCEIVED STRESS AND ANXIETY AMONG NURSES - AN ORGANIZATIONAL ANALYSIS

CONSTANTIN GOGORITA ^a, ALICE PRUTEANU ^a

^a *University of Bucharest, Faculty of Psychology and Educational Sciences*

Abstract

In the present paper we focused on highlighting the possible relations between the variables perceived stress and perceived anxiety level.

The hypotheses tested possible correlations between the perceived stress and age, perceived anxiety and self-perceived stress caused by the life events. Method: Participants were a number of 50 nurses with at least 3 years of specialty studies and a minimum of 3 months experience. The average age is 35 years (minimum 25, maximum 45 years). The instruments were: STAI Anxiety Inventory (State-Trait Anxiety Inventory) and The Social Readjustment Rating Scale. Applying the statistical tools in the way of testing the hypotheses, the hypotheses had been confirmed. Hence, nurses by their activities during the program face high level of perceived stress and anxiety.

Keywords: *perceived stress, perceived anxiety, life events.*

1. THEORETHICAL FRAMEWORK

The nature of work is changing with the speed of wind. Probably, now more than ever, the stress caused by the nature of the job poses a threat to the health of employees and the health of organizations. Fortunately, research into work-related stress has greatly expanded in recent years. But despite this attention, confusion remains in connection with the effects, causes and prevention of professional stress.

For the United Kingdom Health and Safety Commission (1999), work-related stress is the reaction of the person exposed to excessive pressure or requests of the environment in which he operates.

For the European Commission - the General Office for Employment and

Corresponding author: Constantin Gogoriță

E-mail address: cab_psih_gogorita@yahoo.com

Social Affairs (Tihan, Ghiza, 2002), professional stress represents an emotional, cognitive, behavioral and physiological reaction to the aggressive and harmful aspects of labour specifics, the working environment and the organizational climate, a state characterized by high levels of distress and a feeling of helplessness in solving tasks. In an official document issued in 1999, the National Institute of Occupational Safety and Health of the U.S. defines professional stress as a set of physical and emotional responses that occur when demands do not match the capabilities, resources and needs, and that can lead to significant deterioration in health. Surveys from Organizational Environments in the U.S. and Western countries indicate an alarming increase in physical and mental health disorders due to work-related stress (Chruden and Sherman, 1984; Muchinsky, 2000; Rascle, 2001, apud Roth & Cohen, 2006).

In the US, mental disorders are identified among the top 10 professional diseases (National Institute of Occupational Safety and Health, 1988; apud Muchinsky, 2000, apud Vinay Joshi, 2005).

Gruy and Sackett (2003) have shown that there are professions that have an increased risk for a higher level of stress. In this regard, according to the authors, employees with high levels of stress are: teachers, nurses and social workers. Stora (1997) mentions several definitions of stress:

- stress as the force that produces a tension: it is an external stimulus, either physical (noise, heat, cold), or psychological (grief, sadness);
- stress is understood as the result of the action exercised by a stressor, physical, psychological or social agent on the health of a person;
- stress is at the same time the stress agent and the result of this action, in its various particular dimensions; this significance is retained in many works released after Selye's work (1979);
- stress is a defense of the psyche's functioning against sensory and motor stimuli.

Le Blanc, Jonge and Schaufeli (2000) propose the following typology of organizational stressors: content of work (toxic substances; precarious conditions: noise, vibrations, illumination, irradiation, temperature; work posture; dangerous situations; precarious hygiene, lack of means of protection); employment conditions; social relationships at work (poor, inefficient management; reduced social support, etc.).

Cooper, Dewe and O'Driscoll (2001) lists 6 types of stressors: the intrinsic characteristics of the work; organizational roles; labour relations; career development; organizational factors; human / work interface. Greenberg (1999) and Greenberg and Baron (1993) advance the idea of total distress of life.

2. OBJECTIVE AND HYPOTHESES

2.1. OBJECTIVE

In this research we wanted to analyze the influence of stress factors on the members of a medical department. That is why we considered it necessary to study a team of nurses from the County University Hospital "Sf. Spiridon" in Iasi. Taking into account the implications of nursing work, we considered that determining stress factors for most nurses and developing a strategy to reduce / eliminate them, we can optimize the work and mental well-being of employees.

2.2. HYPOTHESES

H1: We assume that younger nurses have a lower stress level than older nurses.

H2: We assume that there is a statistically significant correlation between nurses' age and perceived experience.

H3: We assume that there is a statistically significant correlation between perceived anxiety and self-perceived level of stress caused by life events.

3. METHOD

3.1. PARTICIPANTS

The research team consists of 50 nurses (study group) with at least 3 years of specialty studies and a minimum of 3 months experience. The average age is 35 years (minimum 25, maximum 45 years). With respect to the variable "sex", the structure of the study group is the following: 22 men and 28 women. As far as marital status is concerned, for women the proportion is 1/1, which means that for every unmarried woman there is one married. In men, the proportion of married persons is higher (a number of 14), the number of unmarried being 8. All employees are of the same nationality. Subjects are part of several sections. On the upper hierarchical line they are subordinated to the physicians and chief nurse, and the health care assistants are subordinated. Served sections are mixed (the patients being both women and men).

3.2. INSTRUMENTS

To achieve the objectives and demonstrate the research hypotheses, we have used the following methods: STAI Anxiety Inventory: State-Trait Anxiety Inventory (Spielberger, Gorsuch, Lushene et. all, 1983) and the Social Readjustment Rating Scale - SRRS (Holmes & Rahe, 1967).

We have applied this inventory to supplement stress tests that focus more on the external aspects of anxiety, while the STAI inventory only addresses psychological aspects. We have used this inventory in order to assess the state of

momentary anxiety that renders the intensity of the phenomenon (STAI Y-A) and the assessment of the anxious personality trait (STAI Y-B). The Inventory of State-Trait Anxiety (Spielberger, Gorsuch, Lushene et. All, 1983) is used to assess the anxiety state, built so that it can be completed by the subject himself. Even if the inventory was designed to measure anxiety, the evaluator must use this term in the discussion with the subject; he has to talk only about the self-evaluation questionnaire. The inventory consists of two separate parts that independently assess anxiety as personality traits (STAI Y-B) and anxiety as a state of moment (STAI Y-A). Applying the test correctly requires that the subject completes the first part of the inventory that has as aim the anxiety as a state of moment (STAI Y-A), so that the subject is not influenced by the responses he gives for the scale that aims the anxiety as personality traits (STAI Y-B). Each part of the inventory contains 20 questions, each question having four variants of response, depending on the intensity and frequency. For interpretation, a value of 1 to 4 is given to each item and items 1, 2, 5, 8, 10, 11, 15, 16, 19, 20 on the STAI Y-A scale and items 21, 23, 26, 27, 30, 33 on the STAI Y-B scale and the quote will be inversely from 4 to 1. The total score is made by summing up the scores of each item, the total value being between 20 and 80, the scores over 20 characterizing the clinical anxiety. Instructions for use are printed on the inventory, their understanding by the subject being essential. The questions only concern the psychological aspects of anxiety, and the somatic repercussions are not taken into account.

The Social Readjustment Rating Scale was built by psychologists Holmes and Rahe (1967); it consists of 41 items (life events) to which a certain score corresponds ranging from 0 to 100, 0 representing the non-existence of stressful events, and 100 representing a maximum bearable stress. The subject is asked to mark the events experienced in the last 12 months, and to sum up the values corresponding to them. The following results are obtained: easy life crisis: 150-199 points; moderate life crisis: 200-299 points; major life crisis: >300 points.

3.3. PROCEDURE

The instruments were applied after an informed agreement was previously completed. Application took place within the organization.

3.4. EXPERIMENTAL DESIGN

Independent variable: age of nurses;

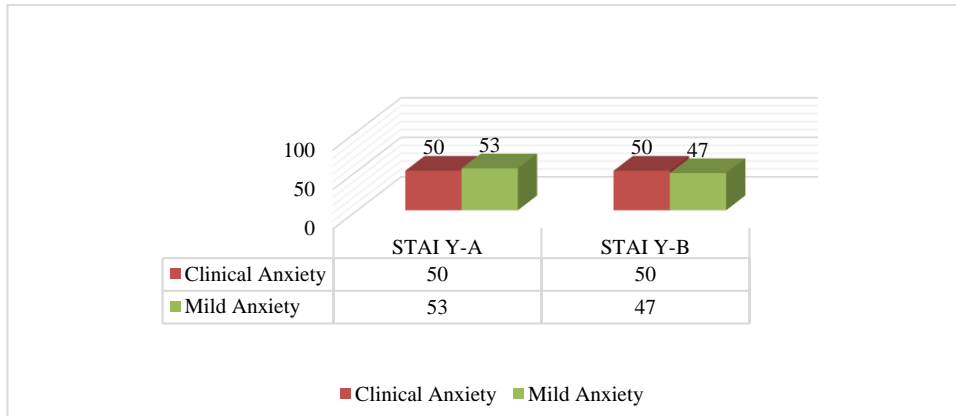
Dependent variables: perceived anxiety, perceived life events.

4. RESULTS

The first step in research was to measure the stress level in the group of selected nurses. This measurement was done using the STAI questionnaire of anxiety developed by Spielberger, Gorsuch, Lushene and collaborators (1983).

Analysing the individuals' collected data it can be seen that a large proportion of the subjects in the group of nurses show high levels of stress (psychological and somatic aspects). Once it has been established that there is a high level of stress, discussions with employees of the hospital followed. They were held in small groups (2-3 employees) and they had as purpose finding out discontent, problems and difficulties that nurses encounter in their work. As a result of these discussions an inventory of stress factors was made, which was afterwards subject to the attention of all employees and constituted support for differentiating the levels of stress present at employees (figure 1).

Figure 1. Levels of stress according to STAI



Along with preparing the inventory of stress factors, we also collected information on absenteeism, litigations, violent acts (verbal or physical), mistakes in professional activity, illnesses and work accidents occurred in 2013. The data are presented in table no. 1.

Table 1. Additional information about the nurses' activity-a synthetic presentation

Employee	Absent	Litigation	Violent Acts	Errors	Diseases	Accidents
Total	83	24	87	41	61	27

By correlating the data obtained from employees with the age variable, we found that younger nurses had lower stress levels than older nurses ($p < .05$) (H 3 confirmed), but on a deeper analysis, we realized that in fact the manifestation of

the stress is very well managed, the latent stress being very dangerous for their health.

The age variable is related to the professional experience (H2 is confirmed). As a result of this correlation, it has been noticed that a maximum level of stress is found in employees with a 3 year accumulated service. They have reached a level of saturation and are going through a phase of transition in which they have to learn to control their problems. This control is found in employees having 4-5 years tenure at work. Obviously, recently employed subjects have the highest level of anxiety and stress, probably due to social demands, the need for adaptation, external and internal criticism.

In order to track the intensity of the stress level, closely correlated with the probability of crises occurrence, we applied the Social Readjustment Rating Scale. The results show that, overall, there are no significant issues as far as it concerns the stress that has occurred due to the events of everyday life. Only 7.3% of employees face a major crisis, leading to an 80% probability of illness, according to the methodological guidelines mentioned by Holmes and Rahe (1967). Where there are moderate crises (21.6%), the chances of illness are 50%, and where mild crises occur, the chances of illness in the future are 35%.

5. CONCLUSIONS

All methods of assessment and measurement of stress can be used by managers in enterprises for the diagnosis and prevention of stress. Choosing the most effective and appropriate methods belongs to trained managers, knowing that decision-makers in enterprises have the "key" to the health of human resources in their organizations, although this has long been overlooked. Overworking the body due to excessive conscientiousness, care to others or pride, contributes to the premature and inefficient consumption of adaptation energy. This situation is damaging for that person but also for those around him, creating an unfavourable working climate. The solution can only be balanced use of all human potentialities so that the organization's performance to be maintained at a high level over the long term.

Persons found in a state of stress should be treated with patience, in order to have the chance to recover. Temporary relief from tasks, psychological counselling, for better time management, training in an exercise program, will help them recover better working capacity, with beneficial effects on them, but also on achieving the organizational objectives (Rizeanu, 2016). We do not deny that stress management programs are long-lasting. In time, however, the emphasis has to be shifted from the identification of tension and stress signals to prophylaxis, by preventing the employees' morale to be altered. We are convinced that in an economic climate vitiated by the problems of transition, managers in organizations

have a decisive role in creating a cooperative working climate where stress factors are reduced to the maximum.

Due to the fact that a large number of employees have expressed their dissatisfaction with the same issue, we can consider that the factors listed above represent active stress factors. Thus the stress reduction strategy will mainly focus on reducing them. The solution we have proposed is a combination of stress management with organizational change.

In the first phase, we recommend the development of specialization programs in which all employees participate one by one, with the purpose of broadening the perspective on the possibilities offered by work with patients.

Along with these courses, behavior can be changed within the institution by promoting friendly attitudes between doctors and nurses. They can start both from the head of the institution and from nurses. In this way, the image of doctors about nurses can be improved, and nurses can assess, diversify and develop their professional abilities.

Participating in the specialization courses offers the opportunity to interact with other professional backgrounds, leading to a re-assessment of the perception of their own professional activity. The assessment of this strategy can be done after at least 6 months, time required for the participation of at least a number of nurses in the specialization courses and the occurrence of the effects related to the less formal atmosphere due to behavioral changes. A form of assessment could be done through interviews.

To improve communication between nurses and physicians, besides the possibility of friendly relationships described above, meetings can also be held in which both nurses and physicians participate, where they can express their opinions.

An index of good communication is the extent to which the boss and subordinate agree on work issues and each is sensitive to each other's point of view. The parties may "agree to disagree" in some respects. These meetings aim to present more points of view and to highlight that they can lead to the expected results. The agreement between "parties" involves increasing confidence in the professionalism of others. Creating team spirit aims at increasing the efficiency of working teams by improving interpersonal relationships, clarifying objectives and roles (what does the team do and who is responsible for what?). It can thus facilitate communication and coordination.

The formation of team spirit usually starts with a diagnostic session, "often kept away from work, where the team examines its current level of functionality" (Sullivan & Bhagat 1992). Due to the fact that in our group the main factor of stress is the involvement in prolonged service activities, the need to hold these meetings away from the workplace is disadvantageous. Thus, the chosen solution was to conduct the diagnostic session within the institution during the weekly

meetings. The goal of this phase is to make the map of strengths and weaknesses of the team in its current condition. The result of these meetings was a list of changes needed to improve its functioning as such.

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